



Sir L. Alma-Tadema, O.M., R.A., pinxit.

A DEDICATION TO BACCHUS.

Auguste Blanchard, Sculp.

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THE ELEMENTS OF DESIGN IN INTERNAL DECORATION.

By T. R. SPENCE.

Read before the Royal Institute of British Architects, Monday, 14th December 1908.

TO enumerate only the elements of interior decoration would mean a very long list. It is well within the mark to say that the decoration of architecture has been practised for more than three thousand years—we know, indeed, that the decorations quite recently discovered in the excavations of the Palace of Knossos, in the island of Crete, date from a very much earlier period. The examples and styles of almost every period are more or less faithfully recorded in books, museums, and in the actual remains existing in at least three continents. These are made familiar to architects, the study of them forming a part of the training of students in qualifying for their profession. A history of decorative art would, as you know, occupy, not one evening, but many; so it is not my intention to attempt such a task, or to recount the work accomplished by the Egyptians, the Greeks, the Orientals, the great mediævalists of England, Lombardy, Flanders, France, and Germany, the Moors, the Byzantines, the men of the fourteenth and fifteenth century Renaissance, and a host of others.

Notwithstanding all these examples, there is no reason why we should be complete slaves to their magnificent domination. Neither should we in any way despise the triumphs in line, form, or colour on which the ancients have set the seal of beauty. From savage races to those which have attained to intellectual and artistic fulness we find an equal instinct and love for colour and its disposition in beautiful shapes. The old men followed their instincts for creation or translation from Nature—such elements as were their ideals of beauty. Why should we of the twentieth century be denied crystallisation of such figments of beauty in colour and shapes as may have drifted into the net of our most fervid moods—moods from which invention springs and an intenser clearness of vision of things lovely in themselves, of distinction in style, and of sympathy with the architect's creation? In the first place there is the decoration which is entirely the architect's achievement, in more or

less permanent materials, forming not only the anatomy, but much of the clothing of his work—I mean in the design and disposition of such materials as wood, stone, metal, marble, tiles, glass, gesso, mosaic, &c.—the unity of all this expressing his own particular art. From this single partnership great things have been accomplished which are treasured as ideals by most students. Bearing on this, it hardly seems necessary to mention Wren, with his vigorous Renaissance, and the brothers Adam, with their refined rendering of a comparatively distinct phase of it. The fireplace, ceilings, and woodwork in Wren's and other men's work absorbed the best of their decorative aims, and in many cases the rooms in which they are placed almost need no other decoration. The client, if a collector of taste, further enriches the internal decoration by choice bronzes, pottery, inlay, pictures, &c. The combinations all increase the colour quality of each other, and of the room as a whole, and beyond this I venture to think the art of the decorator may lend additional interest should he be endowed with artistic individuality, a sense of style, the sentiment of colour, and the power of design. His details should be welcomed if they fall into line and harmony with their setting, and so increase the treasures of thought set up for the occupier.

As an early example of a choice of elements which go to make a scheme of decoration I may quote some fragments from the *Odyssey* of Homer, in which he speaks of the Palace of Alcinous and its threshold of bronze. To quote: "There was a gleam as it were of sun or moon through the high-roofed hall of Alcinous. Brazen were the walls, which ran this way and that, from the threshold to the inmost chamber, and round them was a frieze of blue, and golden were the doors. . . . Silver were the doorposts, that were set on the brazen threshold, and the hook of the door was of gold; on either side stood golden hounds, and within were seats ranged against the wall from the threshold even to the inmost chamber, and thereon were spread light coverings, finely woven, the handiwork of women. There were youths fashioned in gold, on firm-set bases, with flaming torches in their hands."

You have fortunately a member of this Institute who has shown with remarkable skill all these things in combination—I refer to Sir Lawrence Alma-Tadema, from whose work much may be learnt of the charm of sumptuous interiors, bejewelled as they are with marbles, metals, stuffs, painted decoration, and other accessories which go to make fine schemes of colour: details satisfactory in themselves and well fitted for good decoration, gathered from imperial Rome, or, one may say, from the charm left on Roman things by the genius of the captive Greeks. In this respect is included the selection of such elements as are taken from nature as being rightly decorative—the olive, the laurel, the pomegranate, the orange, the vine and its leafage, &c. A combination of these in forms of wreaths, festoons, &c., lends itself to the adornment of architecture—the curving festoons for horizontal shapes, the pendant for vertical shapes, and the circular wreath for telling expression at a distance. These particular fruits and plants have had a long domination in architecture, and go to prove that there is a limited number of things in nature that can be used with success. As architectural or decorative detail, there are of course many other plants in nature that may be used, but they require, shall I say, transfiguration or convention. In those mentioned, however, there is a precision of form and suitability needing no convention except in their grouping. In the way of a limited number of natural forms as decorative elements, the Egyptians have shown what can be done with the lotus, the cane, and binding bands of reeds. The festoon has become in careless hands a very baggy sort of detail, generally dubbed the "swag," a term which rightly indicates its debasement. For examples of the diversified and successful treatment of the wreath and festoon, there is no better master than Mantegna, who evidently raided his garden for the finest fruit and plants, arranged them in festoons, &c., and actually painted from them as models, not merely trusting to his memory of classic renderings.



FIG. 1.—EXAMPLE OF PISTURICCHIO'S WORK, SIENA CATHEDRAL.

It is now the fashion to paint nearly everything white. Working house-painters call it the draper's period. That it is admirable in many cases I admit; but its use on all occasions becomes extremely monotonous; it indicates a certain poverty of thought, and belongs to the transitory interest of things easily done. We might extend to colour, with its varying charms, a welcome in the same glad spirit with which we greet the violets and daffodils after winter snows.

Decoration is a language which appeals to the emotional side of life, and its expression should consist in interpretations of what we call charm or beauty. A great Frenchman's definition of beauty is that it is "the splendour of the true."

The full and sumptuous quality of colour in decoration seems to me the rarest and most difficult to attain, the predominance of primaries being essential: such schemes maintain their interest longest, mellowing rather than deteriorating in tone. We all know the sustained pleasure that is associated with Oriental tiles, pottery, rugs, &c., the works of Carpaccio, Giorgione, Bellini, Pinturricchio, Botticelli, Benozzo Gozzoli, Signorelli, and many others who unite effulgence of colour with interlacing richness of detail.

It may appear that quoting pictures is wide of the mark, but as decoration the greatest triumphs in colour and design have been set within the compass of a frame; and with such examples as an incentive the standard of our work should reach higher. The study and value of pattern is of great importance, but pattern is not the crown of imagery. To me there seems at present no great movement in the higher kinds of decoration beyond what is known as ornamental design. The great Italians cherished high ideals, and used ornament only as an accessory to their dramatic and romantic conceptions, weaving out pictures that are decorative and full of the distinction of style. These achievements are now the stars of our pilgrimages.

Lord Leighton had aims and dreams in this respect. He has left us in his *Daphnephoria* one of the great decorative pictures of the world, containing as it does many of the finest elements of decoration in the procession of singing children, youths, and women, carrying the beautiful symbols of their faith through the olive groves, beyond which is seen the City of the Violet Crown set against the Attic sky. The landscape alone is a great decoration.

A magnificent example of wall decoration is to be seen in the Gallery of Battles at the Escorial: one wall, about 150 feet long and 15 feet high, is entirely covered with frescoes illustrating the mediæval battles of Spain. The armour, with its fine details of a beautiful craft, the forts, landscape, and towns, and other accessories, are given with such correctness of detail that you might imagine a Spanish Viollet-le-Duc had been the helpmate of the painter. In the Palace of Justice in Paris, in one of the corridors, may be seen a fine decorative wall painting, by Merson, illustrating the charity of the good king St. Louis, in which all accessories of mediæval armour and furniture are delightfully satisfactory to those who care for the archaeology of the period of the incident; yet, added to this, the work is imbued with and expresses the tender sentiment of the benediction of the young king to his poor.

To me the interlacing of details of objects having beautiful forms always indicates a continuous enthusiasm on the part of the decorator.

Puvis de Chavannes' wall paintings show wonderful decorative landscape harmonies, but are peopled with somewhat clumsily costumed classic figures. With every respect for his great accomplishments, I venture to think his works would have reached a higher water-mark had his draperies possessed some of the searching truth to nature and the fine style of the figures in the Parthenon frieze. If the details of archaeology influence you, it is well that they should show what is best in the particular period chosen. Even many of the great Italian masters in their classic figures seem to have painted their draperies from fragments of the antique rather than from the ever-varying forms of draperies folded round the living model.



FIG. 2.—FROM A PAINTING BY FIORENZO DI LORENZO AT PERUGIA: SUBJECT, A MIRACLE OF ST. BERNARD.

Probably Chavannes was influenced or inspired by the frescoes of Benozzo Gozzoli in the Campo Santo of Pisa: these as a whole are more interesting in being more jewelled with detail of great variety.

There is a number of decorative painters whose work is intensely interesting, from Cimabue, Carpaccio, Giorgione, Ghirlandajo, Michael Angelo, Raphael, Tintoretto, Paul Veronese, Luini, Signorelli, Fra Angelico, Gaudenzio Ferrari, Sodoma, Tiepolo, the artists of the Campo Santo of Pisa, and a host of others, down to our own times of Burne-Jones, Alfred Stevens, Watts, Richmond, Albert Moore, Burges, Morris, Bodley, Abbey, &c. But one evening is quite inadequate for such a subject. I may say, in passing, that the time does not seem ripe in England for decoration on this higher scale; what little is done trends rather to a technique that is a kind of swagger of the brush than to the effort to create pictorial decoration which shall be an embodiment of things beautiful. The sincerity and reverence of the primitives, though lame in technique from a modern point of view, have a more lasting interest.

PERMANENT MATERIALS.

Now there is a strong and commendable desire for the use of permanent decorative materials, but the choice of such materials requires great judgment, as there is a danger that they may become a permanent reproach. I am thinking of some apartments in a public building lined with painted tiles in the transient fashion of twenty-five years ago, which time has never blessed with mellowness: they still retain unchanged their brazen crudity.

Marble is a fine decorative material and gives an endless variety of colour as a palette, but there is danger in a redundant palette. It needs great reserve in the placing of its parts. There is a sort of impression that because the samples available are finely marked any combination must come right. This fallacy may be proved by some modern efforts. My impression is that the Byzantines, the Italians of several centuries, and the Moslems have reached success in their use of inlays of small areas on delicately veined grounds, especially when the inlaid forms are in sympathy with the architecture and are distributed to help its expression. By inlay I do not mean intazzia, but the working into your treatment small, shall I say, tiles of marble. I may mention the Church of S. Miniato, the church in the island of Torcella, the Church of S. Sophia in Constantinople, the Chapel of the Armenian Monastery, the Mosque of Aksa and the Shrine of Omar in Jerusalem, and many other examples.

The use of bronze on marble is a good element of decoration. In Rome and other parts of Italy are many examples of marble superimposed with bronze. A fine example of a bronze couch inlaid with silver may be seen in the Baths of Diocletian. Donatello's bronze panels set within marble frames are splendid examples of its use.

Copper is a beautiful metal to be used with discretion. Its fine qualities have been somewhat besmirched in recent times by numberless 'prentice hands, or rather by those who disdain apprenticeship. Wrought iron has many possibilities, as you all know.

GEDSO.

Gesso in its proper distribution as an adjunct to schemes embracing other forms of decoration is of much value, as may be instanced in the altar-pieces by Carlo Crevelli, the wall decoration of Pinturricchio, the Italian painted coffers of the fifteenth century, and the Norfolk and other screens.

The Sienese have another method of using gesso in flat smooth faces, and on this face incisions and scratching of ornament are made. Fra Angelico has used this method on nimbi, and on the decoration of angels' wings. Raised and gilded forms in gesso on natural wood have been practised with great success by many workers, more especially by the Chinese and Japanese.



FIG. 3.—THE ANNUNCIATION, BY DONATELLO, FLORENCE.

GILDING.

Gilding plays an important part in decoration. On whatever part you select to place it, I should say gild the whole of the relief, and avoid what is known as hatching or picking out.



FIG. 4.—SCULPTURE BY MINO DA FIESOLE AT PERUGIA.

Such a process only means a worse distortion of your modelled detail. To me the glitter of gold on the high lights is hardly as interesting as the gilded shadows where reflections are many and various. Generally the qualities of gold are best seen on modelled forms; perfectly flat



FIG. 5.—WORK OF DELLA ROBBIA AT FLORENCE.

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surfaces do not always show its value. The private apartments of Isabella d'Este at Mantua are fine examples of the use of gold. The ceilings are beautifully modelled, and gilded all over with such variations in the gold as can be gained, by parts in mat, parts burnished, and parts lacquered. When all this has been done certain small incisive touches of blue or other colour in the deep sinkings enhance the whole effect. In one of the rooms the low relief enrichments are carried down the wall, forming a frieze, and gilded as on the ceiling. Below this the walls are in dull Italian walnut, thus forming a negative and increasing the sumptuousness of the gilded ceiling and frieze. There is a small room at Hampton Court with similar treatment, except that the frieze is occupied by a procession of painted figures.

Spain is rich in sumptuous examples of gilding—reredoses and screens, with much low and strong relief ornament, being altogether overlaid with gold. Notwithstanding the multiplicity of modelled detail, the whole effect is indescribably rich, yet big and stately in expression. In one of the vestries of the Cathedral of Toledo the walls are covered with richly coloured moresque tiles, and in later times on these have been placed strongly modelled arms of Castile and other provinces—big in area, relief, and detail, and covered with gold. The result is not only supremely rich, but delightfully harmonious.

For intensely interesting methods of treating gold by etching lacquers and painting shapes with semi-transparent colour over gold you may refer to the works of the earlier Italian schools in the National Gallery. There is a shimmer of gold through the pictures and continued on to the frames.

FRIEZES.

The frieze of a room, notwithstanding the numerous examples as a decoration (or desecration) which we see in modern times, still remains to me one of the best spaces for treatment and effect. It is the crown of your walls, and is a space sufficiently isolated not to interfere with other objects which are included in the ornament of the walls; and if its area is generous the decorator has an opportunity of showing his claim to that title. All pictures being below the scheme of decoration included in the frieze and cornice, the common practice of hanging pictures near the ceiling or building them up in pyramids is prevented. The haven in which an artist would have his work is on the line where the owner can examine it with comfort, and so enjoy whatever it holds. At the present time we see many examples of friezes showing so-called landscapes, seascapes, and incident fresh from the roller stridently repeating their crude irreverence to nature.

In regard to pictures more attention might be given to what would be a great additional means of decoration, that is, the design of the frames on more architectural lines. Think of the frames of Crevelli and other Italian masters. Objections have been made that deep friezes lessen the apparent height of a room. This can be obviated by vertical elements in the details of your design. Friezes modelled in low relief and coloured are very effective. It goes without saying that the design and technique should be of the best.

Is there not in many cases a charm and a sense of restfulness in rooms that are low? Our moods and pleasures vary in scale, so that height, light, and space are not always soothing. In the Rezzonico Palace occupied by the Brownings is a small suite of rooms that are low and shadowy, making a pleasant change from the large reception-rooms which form the greater part of the palace. The favourite living-room of Philip the Second in the Palace of the Escorial is an example of snugness and quaintness very soothing amongst the great apartments of that huge pile.

WALL COVERINGS.

Tapestry, woven textiles, embroideries, wall papers, stamped low relief wall coverings of leather and other materials, are very well known, and I believe their selection is made by

the ladies and their friends. In most cases the ornament they bear is designed as a 21" x 21" repeat pattern. The designer seems to have had no worries about architectural fitness when fixed on the wall spaces. Many direct reproductions are made from old Italian embroideries,



FIG. 6.—DOORWAY, BY G. A. OMODEO, CERTOSA DI PAVIA.

Genoese stamped velvets, &c., which of course are very beautiful, only their largeness of pattern has not a wholesale fitness for every space. Of course, if you are the fortunate possessor of fine tapestry, and have suitable spaces, you hardly need worry about placing it rightly.

Ornament to tell at a distance should be large, in the areas of its parts, rather than deep or intense in colour, and for such purpose should lean to incisive geometrical forms. In designing for spaces think of the general flow of shapes needed to help their right expression and sympathy within the architectural lines of enclosures. Accentuate the best features of your design, following up the shapes to their full expression. Cultivate an instinct for the true use of vertical or horizontal lines and features, guard the purpose of the architect's moulding contours, and tread gingerly when attempting to pick out different members with separate tints. The purpose of a moulding's section is to gain the effect of certain incisive lines and certain soft half-tones in juxtaposition: this natural result has a beauty of its own that needs, as a rule, no tinkering. It is not design to fit in mere details of a style or period—it is *ingenuity*.

If single figures are painted within frames of architecture, they should amply fill the space enclosed. For circular spaces remember the Greek coinage. My sympathies lean strongly to the interlacy of detail so placed that the general broad colour scheme is not jeopardised but helped in quality and interest. Exact translations from nature need a new birth, to be restrained or winnowed through imagination: this process commonly goes under the title of convention; small-scale colour drawings only help you a little. Schemes of colour should be "offered up" on the walls; alterations, eliminations, and strengthening must follow on the actual work. Each coloured part should always have its proposed neighbours on its borders, and should include the ornament, as the colour of these added forms materially alters the ground colours. Generally, schemes should first be of gradations of one colour, opposite tints afterwards being carried through in forms of ornament with the idea of bejewelling the work. These are mere suggestions. You cannot lay down laws for colour. The grammar of "the styles" (which is generally accepted as those of the French Louis) is very well known, so that they can take care of themselves.

The collecting of rare and beautiful things in an apartment is a very commendable habit on the part of the occupier, but these miniature museums induce a feeling of nervousness that freedom of movement will end in breakage. This rather suggests to me that some apartment might be set aside for the best combined work of the architect and decorator—to be a work of art sufficient in itself to rank as a cabinet gem in its appeal to those who love colour and the forms in which it is displayed.

Lettering, if in good types and judiciously placed, may be regarded as really good ornament. Small areas of black have great value, and in lettering with its vertical and horizontal shapes you have a detail well suited for the purpose.

The present fashion to reproduce Wren's *naturalistic* carved-wood details becomes a little monotonous. I venture to think the vertical festoons repeated on many pilasters would not suffer from convention, so that the outlines should have a little more relation to the rigid vertical edges of the pilaster. Very often the ornament of straying outlines develops unsatisfactory background shapes, and these shapes seem to catch the eye unpleasantly. It is rather irreverent to speak thus of a great genius. Grinling Gibbons was evidently given a free hand in these details, which certainly are marvels as examples of craft in imitation of natural forms. In Wren's plaster ceilings his own qualities of restraint and the architectural fitness of ornament for its purpose are apparent. I feel nervous in speaking of these gods, but the brown monotony and multiplication of panelling and carving are somewhat depressing in a colour sense.



FIG. 7.—HERALDRY OVER ARCADING, PALAZZO VECCHIO, FLORENCE.

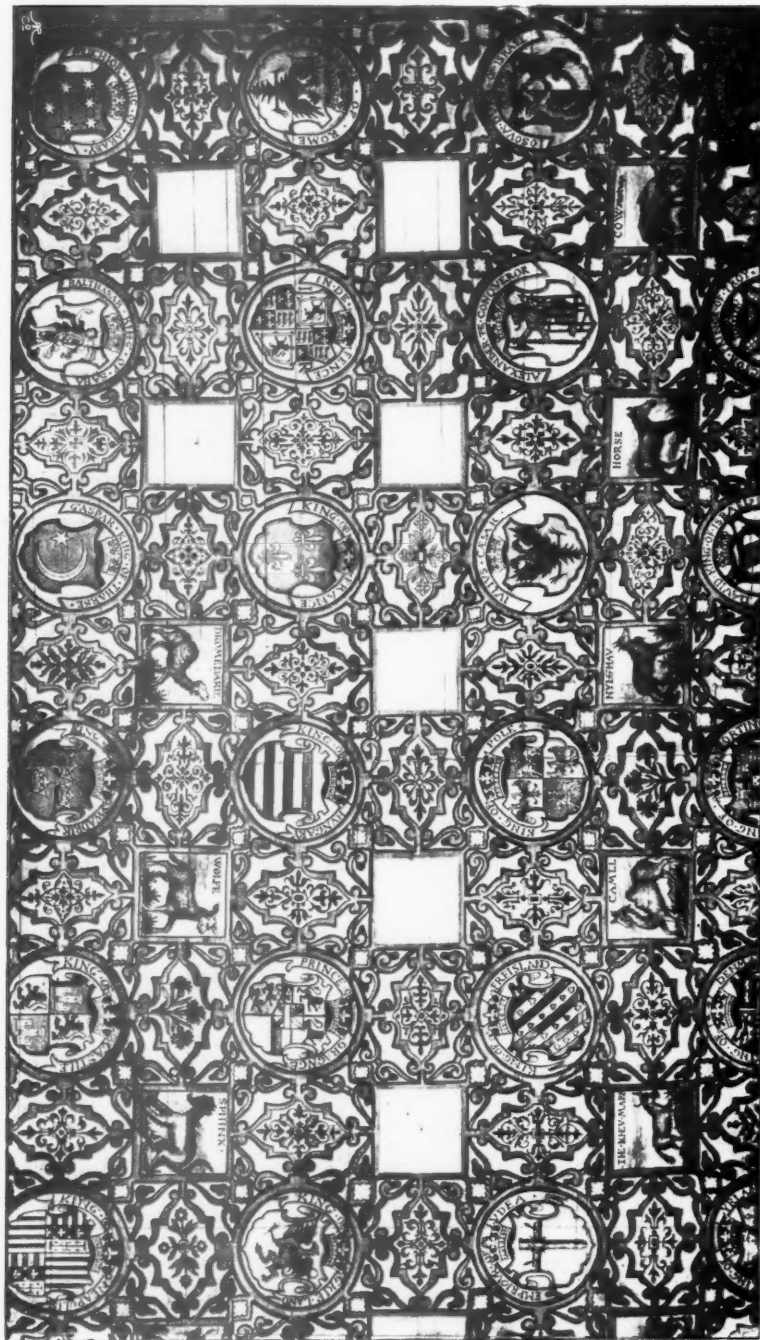


FIG. 8.—CEILING AT EARLS HALL, FIFE. WITH THE ARMS OF "EMPEROR OF JUDEA," "JULIUS CÆSAR," "ALEXANDER THE CONQUEROR," "JOSHUA DUKE OF ISRAEL," &c., DATE 1620.
(From a photograph.)

HERALDRY.

Heraldry is an element which lends itself admirably as a means of adding the interest of colour to woodwork. To me many monotonous stretches of framing would be improved by certain groups of panels bearing colour. And what could you have better than heraldry? The areas of its quarterings and charges, although treated with pure colour, are so small and so largely covered with interesting drawing that such spaces are not unduly aggressive; they give a fillip of jewel-like colour when placed on the natural ground of the wood, and by no means mar the harmony of your scheme.

There is no better ground than natural wool for keeping almost any brilliant bits of colour applied in harmony of tone. The Japanese appear to have grasped the idea, for they seem to flip on any details of decoration in brilliant colours.

I have in my memory an example of decoration on wood (walnut, I believe), in the ceiling of the Church of La Badia in Florence, covering the whole of the nave, deeply coffered and richly moulded. The mouldings enclosing the square panels are overlaid with gold and gradations of sea green and blue ornament. The effect is solemn glowing, and altogether of a twilight richness. The expression of this can be received into the mind at once without effort, and you leave impressed with its solemnity and unity. The nave of the cathedral at Pisa is on similar lines. Some time ago, in a London church (built in the very early days of the Gothic revival), it was decided to apply some scheme of decoration. The roof was open-timbered, brown-black with repeated staining and varnishing. Some suggested that the whole thing should have three coats of paint; the cost of such a method would have been considerable, and the suggestion was not carried out. It was washed and a scheme of running bands of ornament was carried along the purlins on the main roof principles, and in some cases on the cleats over the common rafters. This was done, in such forms as might be used for inlay, in warm whites, low reds, and



FIG. 9.—DETAIL OF BRONZE ORNAMENT ON THE Ghiberti Gates, THE BAPTISTERY, FLORENCE.

greens. This ornament looks from below like inlays of ivory holly, and is, I believe, quite satisfactory.

In Toledo there is a Moorish church with a magnificent timbered roof; the decoration is on the same lines, but whether the fretted ornament is in paint or inlay I cannot remember. The church belongs to the Government, who have erected a permanent scaffold so that visitors may examine the roof. Many fine fourteenth-century examples exist of the decoration of the joists of timber ceilings with judiciously distributed pattern, as in the Hôtel Cluny and many houses on the Loire, and in some rooms in the Ducal Palace, Venice. The Norfolk and Suffolk screens give a fair idea of the style of decoration.

GLASS.

A valuable element of decoration is leaded and coloured glass, giving a great opportunity for interesting design without any dictation as to the trend of its treatment. I may mention some notable and varied examples of its use in domestic architecture which may be seen in the Cluny Museum in Paris. Generally they consist of small panels of heraldry, or subjects in brilliant tints and much detail of delicate painting, suspended as it were on simple shaped quarries of clear glass and backed by the foliage and sky. The lozenges of jewels placed against nature's schemes of colour gain a unity of effect which is always deeply interesting. As a rule we use heraldry in these small centre panels. Well, why not vary the heraldic treatment, and in some cases reserve such spaces for more precious art—art that shall be a definite illustration of some legend, or your own imagery in the field of design?

Apart from domestic work, there is the larger field of ecclesiastical glass, a large subject on which I do not propose to enter.

SCULPTURE.

Coloured sculpture is very interesting and can be used with good results, not by painting in solid oil colour, but by glazing in transparent tints and wiping off the high lights, the surface being first covered with shellac to give a hard skin and stop absorption. I need hardly say that the handling of the colour is not a merely mechanical process. The executant must have the instincts of an artist. I believe the finest examples of coloured sculpture are by Gaudenzio Ferrari and Della Robbia.

PAINTER'S WORK.

The much abused mid-Victorian age in matters of house painting was really the best period. The greatest possible pains was taken by workmen of skill, who could, with very few exceptions, produce the indentures of apprenticeship to their craft; now an indentured apprentice is a curiosity. Then, it was no uncommon thing for good men to be employed for twelve months or more on one country house; now, they might almost avail themselves of a cheap monthly return ticket. In such houses may be found really beautiful technical house painting, where coats of paint and careful rubbing down was not spared; all the delicate members of moulded work and ornament were preserved in all their sharpness. The work was not from the first loaded with a few thick coats, which destroy the sharpness of detail, but was repeatedly treated with thinner fluid.

In using distemper the best way is to give the ground two coats of thin paint and then cover with distemper. Should this distemper require redoing in future years, it is easy to wash it off and recoat, so none of the detail is lost. It may add a little to the expense in the first place, but it is really cheaper in the end. By distemper one does not mean the so-called washable distempers so prevalent now. If such is used repeatedly, the sharp character of relief work disappears. When dry it cannot be washed off. Of course this repeated blurring

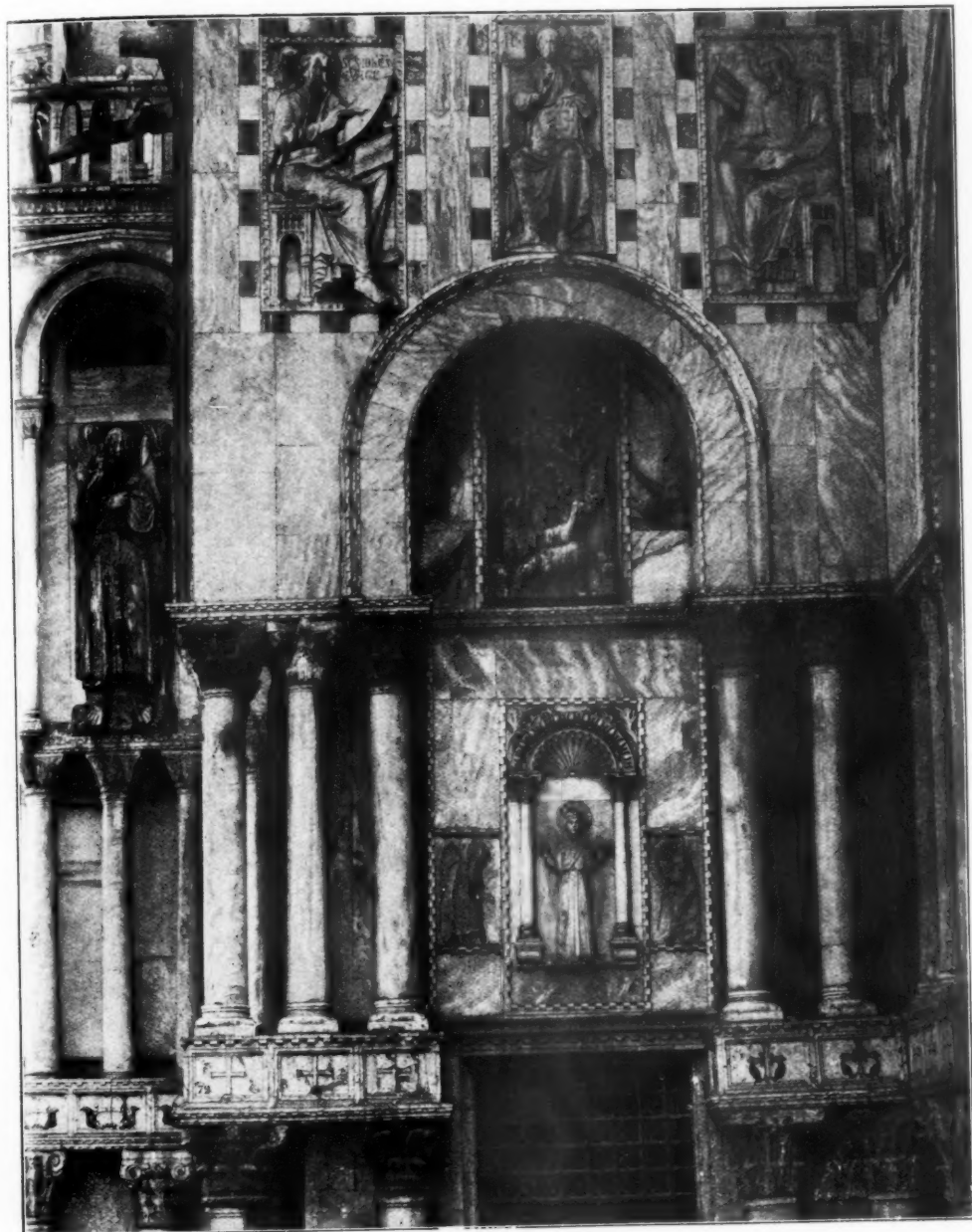


FIG. 10.—MARBLE FACING, ST. MARK'S, VENICE.

of detail might excite the admiration of the modern impressionist. I think we can hardly deny that white lead forms the best basis for all paint; but let us be certain that it is free from adulteration. The same applies to other pigments. White lead, though not such a pure white as zinc oxide, has more elasticity. No good work can be done unless the best materials of their respective kinds are used. Wall papers that are hand-printed are the best, and should in every case be laid on a good lining paper.

ARCHITECTURE.

To me there seem great possibilities for architecture set within architecture as an adjunct in decoration. Architecture is really the basis and beginning of design, and that

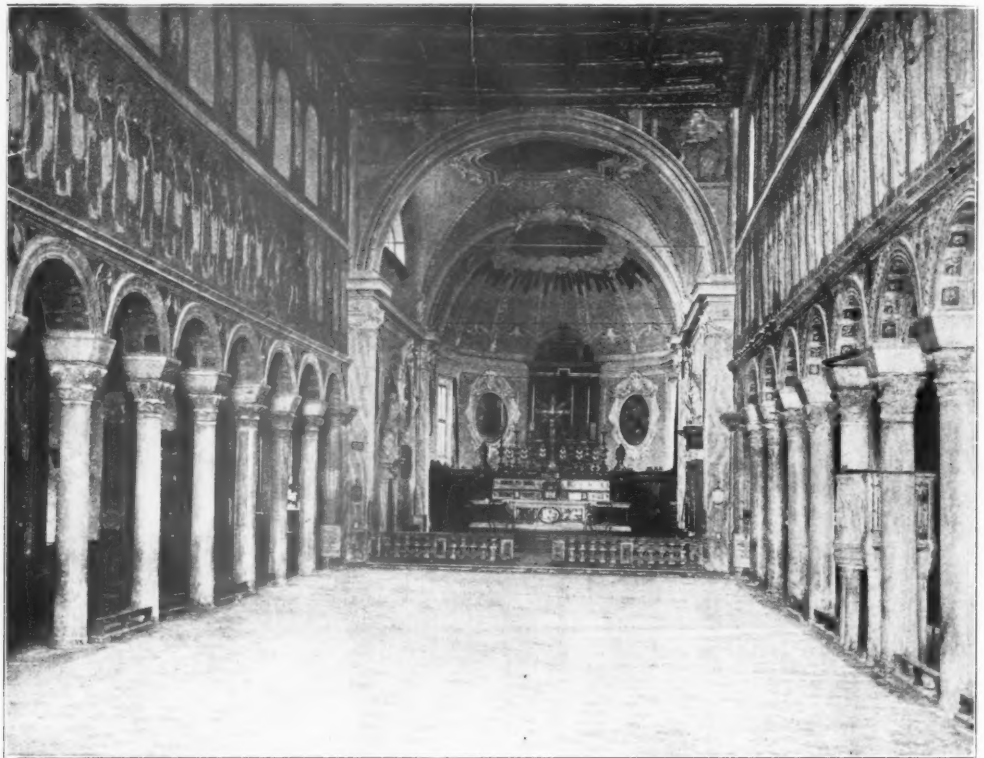


FIG. 11.—MOSAICS IN THE CHURCH OF S. APOLLINARE, RAVENNA.

which it has accomplished in the creation of forms, contours, disposition of vertical and horizontal lines, cannot be overlooked by those who set out to give us a great pictorial or decorative composition. I am not referring to the remarkable examples of painted perspective by the Italians, who, in their zeal for the new discovery, forget that ingenuity did not make great art.

When speaking of architecture within architecture I am thinking of the beauty and fitness of many cities (if painted with a decorator's instinct) to fill with success rectangular

spaces, either vertical or horizontal, as may be directed by the architect. These cities as subjects require careful selection. I may mention some such as are decorative in themselves:—Jerusalem, from the hill of Scopus behind the Mount of Olives; Athens, from Lycabettus set against the Saronic Gulf and Peloponnesian mountains; or looking east, with the violet mystery of Hymettus behind; the city of Florence from S. Miniato; Milan set within the Lombard plain from Bergamo; Saragossa, with the steely blue of the Pyrenees behind, as seen from the south.

This list might be extended from the cities of our own country, beginning with London, and of France and others. The point of sight should not be near, so that due justice would be given to the harmonies of the atmosphere in which they are enfolded. Accuracy of detail is important, but not so much as a grasp of the fine contours and colour gradations in a big sort of way.

Landscape has great decorative possibilities. There is at present a tendency to use so-called classic landscapes (made at home) in which hard strongly outlined rolling clouds, doubtful classic buildings, and large trees are set in vistas of brown tones only. A real classic landscape is a great revelation of its fitness for decoration. In the land where classic art had its birth very little rearrangement is needed. There in itself you find composition tones and colour harmonies. Planes and values are all in order, making a refulgent yet sober composition. The brown treatment is an indifferent substitute for the iridescent radiance of this magic land.

It often occurs to me that there is opportunity now for a great renaissance in decorative design. Donatello, Mino da Fiesole, and other Italians achieved by their genius a personal and perfect culmination from the study of the rather limited Roman remains that were within reach. They were essentially modern, and were



T. R. Spence, inv., et del.

FIG. 12. FROM WORKING CARTOON FOR A SECTION OF STAINED GLASS WINDOW, BIRMINGHAM UNIVERSITY.



FIG. 13.—WAITING FOR THE TRIUMPH.

From the picture by the Author in the possession of Sir John Brunner.



FIG. 14.—A PRINCESS.

From a painting by the Author in the collection of Mr. Eslington, architect.

influenced by the fashion of the moment and ready to embody any new thought for the glorification of their work. Now, in the twentieth century, our treasures of Greek art are largely multiplied and easily available in the British Museum, and in the incomparable Parthenon frieze, the decorative bronze ornaments, coins, and hundreds of other jewels of art are shown the best qualities of dignity and restraint in design for students who have the fervour and ambition to recreate a style that shall be on a par with, yet quite distinct from, the fourteenth-century Italians, and of a freshness and interest that cannot be evolved from a period of decadence.

It is not for me to say what you should or should not do, or to lay down laws for the treatment of any apartment, as the dimensions, the scheme of lighting, and the architecture of its construction must govern the nature of your additions. My impression is that design has its birth from vague memories of beautiful things seen; if careful notes are made for reference in the actual work of creation the operation means death to the imagination.

Ornament and the spaces for its disposition need new thoughts and careful consideration as to the disposition of lines and areas, of the separate details of your ornament, and the amount and variety of decoration already achieved by the architect in the use of mouldings, modelled forms, &c. The battle can only be fought out on the walls or spaces which the architect allots to the decorator for treatment. To this I need hardly add that there is no royal road to the creation of any work of art: consequently, such creations cannot grow into shape without much tribulation and strained endeavour. If you assume the position of an idealist, do not forget that if beauty shall nestle and find a home, there will come along some few who will appraise its real value. As in architecture, you all know there is no rule by which can be imparted that divine something, leaving on it the seal of distinction and permanent charm which is so closely associated with some of the best work of the past.

It is the function of the decorator to be the "magician of the moment," yet working in harmony with the architect. He should reverence the accomplished things of our predecessors, and be guided by work of a period in its fruition, and yet try a little melody of his own. Decoration is not a necessity, yet it appeals to those emotions which add a charm to the practical side of things, and for this reason may be accounted a real asset to the happiness of life.



FIG. 15.—BRONZE PANEL BY LOSATELLO, CHURCH OF SANT' ANTONIO.

DISCUSSION.

Mr. ERNEST GEORGE, *President*, in the Chair.

MR. R. ANNING BELL, who rose at the instance of the President, said that Mr. Spence had given them a most interesting sketch of the history of decorative art in modern times, but the range was so extensive that it was difficult to make any general criticism on it. He should like to have heard a little more about the elements of decorative design—an art which he attempted to practise himself. A study of the ancient work was one of their greatest incentives, but there were certain general principles which might help them too. One matter that they were all agreed upon as most essential to a good design was the element of scale. Architects complained that sculptors and painters had no idea of scale. Was there any possible canon for scale? No two men seemed to agree as to what scale was in relation to anything else. If a sculptor or painter was employed to design work for a window or a frieze, he found that one architect's idea of scale was quite different from that of another. And that put him in a great difficulty. After working with one architect, and having a great deal of trouble and discussion before the proper scale of height and proportion could be agreed upon, he found that the next architect he had to work with had quite another notion of the matter, and just as many reasons for the notion as the first man had for his. Was it anything more than fancy or personal predilection? It was very hard to find any common ground. Architects, he thought, should take up and thresh out the whole subject, and find some sort of reason for scale. Was it relative to distance—to the height above the ground, to the distance that the spectator was from the plane at which the object was placed, or from other objects on other planes—the size of windows, mouldings, &c.? There were all sorts of things to be considered. Some standard as regards scale might be set that all architects would agree was good, so that the painter or sculptor should have some sort of basis to work upon. One never got the same proportions and conditions to work on twice. A painter's or a sculptor's taste naturally tended to give his work at least its due importance in the scheme; whereas an architect's notion often seemed to be that the painting or sculpture was not of so much importance, but was merely a piece of ornamentation to set off something else. If something approaching a standard could be agreed upon, they should all be a little happier, and should not at least have to make so many futile sketches at the beginning of a work.

PROFESSOR REGINALD BLOMFIELD, A.R.A. [F.], said that the Paper had been full of most interesting detail, which they would all take to heart and profit by. It was so full of detail, indeed, that he (the speaker) had lost his way in it several times. Mr. Spence had set so many hares running that it was difficult to know which to tack on to.

He would endeavour, however, to recall one or two points on perhaps minor matters. One of these was white paint. Architects were very fond of white paint—perhaps, as Mr. Spence had kindly suggested, because it was the refuge of the destitute; they knew they were safe with white paint—and so, in fact, they were. White paint, however, was often dictated to architects because of the uncomfortable state of the arts and of the patrons of the arts. Patrons of the arts wanted panel pictures and nice little knickknacks isolated, and there was no doubt that white paint set off these things wonderfully well; so that it was not entirely the fault of the architect. Apart from that, however, white paint formed a most admirable background for bits of colour. Then Mr. Spence thought brown panelling rather dull and triste, and not as satisfactory as it might be; but he did not take into account what was in the mind of a man like Wren, for instance, when he employed brown panelling and white plaster—that these were to be taken as parts of a great scheme to be judged as a whole. The architect was a very modest man: he always kept himself in the background as much as possible, and put in these unobtrusive touches as a set-off to the work of his brethren the painters and sculptors. Mr. Spence had mentioned Wren with great admiration; he might also have mentioned his predecessor, Inigo Jones, who was a master in the assemblage, organisation, and direction of the arts. This could be seen in the double cube room at Wilton, with its wonderful example of decoration of the time of Charles I., controlled by a great English architect. Coming to a point of technical criticism, Mr. Spence had quoted the palace of Alcinous and the *Odyssey*. The *Odyssey* was, of course, a splendid poem and delightful reading; but they ought not to go in the slightest degree by what poets and literary men said about the arts. It was one of the most engrained fallacies of English culture to imagine that because a poet had written a wonderful description of a picture, or statue, or piece of sculpture, the artist had then and there to interpret it literally. But a distinction was laid down years ago that the poet had to get his effect by consecutive impacts, and the artist had to get his by a momentary impact—when, for example, a person entered a room, the effect came through the eyes at once, whereas in reading a poem the effect was gradual and cumulative. That was an important distinction to bear in mind nowadays. Critics were fond of criticising painting, sculpture, and architecture from the point of view of literature: this was a great mistake, and artists should not encourage it by quoting the poets in regard to the arts. There was a much larger question than that—at any rate for architects—i.e. what was their relation in these matters to the sister arts. As many present might

recollect—it was his own experience some years ago—they used to think they should save architecture by endeavouring to make themselves painters and sculptors and metal-workers and various other things. That, however, had proved itself to be the wrong tack: they did not make themselves good craftsmen, and had ceased to be architects. The question was, how were they going to shape towards architecture, and what exactly was their relation to the sister arts in these matters? It was not, he thought, for the architect to take a personal part as an executant. Architects had to try to think out the relations of “the arts,” and endeavour, to the best of their ability, to help their painter or sculptor colleagues on these many technical points, such, for instance, as the interesting point Mr. Anning Bell had raised with regard to scale. Sitting at the Council dinner that evening next his friend Professor Gerald Moira, he had asked him what he would do in this matter. Professor Moira had answered with extreme precision, “For God’s sake give us elbow-room!” He thought that hit the nail on the head. Let architects give the decorating artist plain walls, good proportions, and simple work—room in which to turn round and do credit to himself and to the architect. Then there was the important question of scale—that tremendous conundrum propounded by Mr. Anning Bell. Mr. Bell had hit on a subject which he (the speaker) was not in the least competent to answer, and which nobody ever had answered. There were books—he had come across a whole catalogue of them—written on canons of proportion; but he was afraid that for their purposes these were beside the mark. Architects had their own methods and adopted them; but in the abstract he believed they all came to the conclusion that it was impossible to lay down any one abstract ideal of scale to fit everything. Mr. Bell said: “One man says my scale is all right, and another says that it is all wrong. What am I to do?” That perhaps was scarcely the way to look at it. An architect’s design ought to be an organic conception in which each part fitted into the place which he had seen from the start and realised. Then, however beautiful the work may be which is produced by the painter or sculptor who is good enough to help them, the architect is entitled to say “That upsets the scale of my building in the sense that it strikes a wrong note—it is altogether bigger or smaller in conception than I had in my mind when I was designing my building.” Each part, he thought, should fall into its place as an element of one great organic composition. It was in this sense that the architect’s work was architectonic, and it was all-important that this view should govern their attitude towards the arts.

MR. GEORGE HUBBARD, F.S.A. [F.], referring to the question of white paint, said that they all instinctively felt that white paint was to be commended, but perhaps they did not all appreciate why white paint appealed to them. To his mind white

paint should always be largely used, because white was the natural standard by which any colour could be measured. The juxtaposition of colours created confusion in the mind, for the comparative value of colours could not be measured as against each other, but only in so far as they departed from white. White ceilings, doors, and architraves kept before the eye the standard by which the true value of wall-colour decorations could be measured.

PROFESSOR GERALD MOIRA, referring to the matter of scale, said he thought Mr. Anning Bell’s argument a little unnecessary, because the decorator ought to realise to a certain extent the scale of a building even from the drawings provided by the architect. Then Mr. Spence had talked about isolated pieces. Some of these were very fine—Della Robbia’s pieces, for instance, were extremely fine—but how did they go with their surroundings? It was a little unfortunate that they were put into places which were built much before the time; but to-day they had to consider a building that was built to-day, and decorated to-day, and practically finished to-day. We lived in a motor-car period, when a thing was commenced and carried through at once and was not gradually developed. Therefore we had to design our figure decoration, or whatever it was, to fit the building, and to be part and parcel of it. That was a point they ought very seriously to consider.

MR. J. D. CRACE [H.A.] proposed a vote of thanks to Mr. Spence for bringing before them a very interesting subject and for the many charming illustrations he had shown them. He thought that the discussion so far had drifted a great distance from what they had started with—viz. decoration in the sense of colour. He could not understand why it was that all the Papers he had heard on the subject of colour decoration in that room always seemed, instead of adhering to the question of what was excellent for the building, to drift away into side issues—as to how details may be treated, or as to the various methods and processes and dodges of executing decorative work in various materials. It appeared to him that what was wanted more than anything else in that room was a discussion as to what were the things that made for successful decoration in the sense of doing good to the building. Mr. Spence had mentioned at one point that certain decoration had been executed in spaces set apart for it by the architect. He could not imagine anything more absolutely ruinous to the effect of a building than to have individual spaces set apart for decoration in various parts of the building, or in one part of the building, and all the rest held in reserve. Mr. Spence had mentioned many painters—Italian painters principally—whose work was decorative, and had shown some of their work on the screen, of course without the aid of colour. It was quite true that those paintings were decorative in themselves, but they did not constitute decoration, and Mr. Spence had left out of account altogether that those paintings were,

almost without exception, in settings which meant decoration—that is to say, they constituted the picture, the pictorial decoration part of the building—not only the accessories in the painting itself, but the surrounding border or ornamentation which connected it with the building. He (Mr. Crace) had brought round a few Arundel prints and sketches the better to show what he meant by wedding the paintings to the building. Take, for example, Pinturricchio, a master of decoration. His beautiful paintings in the Library of the Cathedral at Siena had been written about over and over again, but very few people took the trouble to notice how they were part of the whole building. The pilasters and everything seen in the illustration of one of his pictures were on the flat; it was all part of the decoration. And what was the result? The blue pilasters were not put in because the artist had a fancy for blue at that point, but because they led up to the blue-and-gold in the ceiling. Another of the prints showed the position of that very decorative painting in a space which was conducted up into the roof, with a most extraordinarily able command of colour, to make an entire decoration of it—to decorate the building, not to put a decorative picture into a space “allotted by the architect.” It was not allotting by the architect that was really wanted in decoration. The architect should decide beforehand what sort of decoration he wanted, and then decorate the building, not decorate a particular space in the building. Another subject touched upon was the architectural accessories in painting. These accessories performed a most interesting and valuable function in connecting the painting with the surrounding structure. The representation of buildings and portions of buildings shown in the picture had the effect of welding the picture into the building, which was a most important function. In one of the examples shown the pilasters and arches really connected the picture with the building, and gave the picture the effect of being intimately allied with the structural part of the building. Paul Veronese painted wonderful pictures of a decorative kind, but he did not just stick his pictures into a white space. One speaker spoke of the value of white as showing off colour. That was just what the old men avoided; they did not want their colour to stand alone surrounded by white; that was not the method of Paul Veronese; his pictures were not merely set into a frame, but all the spaces between were filled in with coloured or other ornament. Take another example with some of the beautiful little subjects by Ghirlandajo—they were all framed together, and the space between was filled in with gold and grisaille ornament. Take Titian: he did not go and plant his picture into a white ceiling, and put a gold moulding round it, and say how well the white showed up the colour. He made the whole thing part of the picture. It was that tendency to isolate fragments in decoration that was the ruin of the decorative idea. A picture might be decorative in itself, but if it was

not in some way affianced to the building it would never be really a decoration. That would be found in numberless instances by artists of all the most interesting decorative periods. Take the whole of the Italian decorations from the fourteenth century on to the end of the sixteenth, and it would be found that the painters invariably put their decorative pictures into decoration as a whole: even Tintoretto, who painted on such an enormous scale, and with such boldness, his finest work of that kind in the School of San Rocco was surrounded by the most elaborate ornamental decoration and most carefully adjusted colour—no white left to show off the beauty of the colour. He entirely differed from that opinion of white. First of all, extensive white was very bad for the eyes, because it was playing upon the same optic nerves all the time it was visible; whereas with a well-adjusted harmony of colours the eye was constantly relieved: the nerves susceptible of one colour were relieved directly the eye passed to another. There was, however, one great explanation of the popularity of white, viz. that it was the last refuge for the destitute.

THE PRESIDENT said they thanked Mr. Spence heartily for his very interesting Paper, which had been so full of suggestion. He felt with Mr. Crace that white was resorted to because it was the simplest and cheapest form of treatment open to them, and with it we avoid anything that was very vicious. It is in fact avoiding the problem of decoration; but to have cabinets of pictures and other things picked out by a white surrounding was very trying. He always preferred lower tones as a rich and harmonious background.

Mr. SPENCE, in reply, said that Mr. Crace had slightly misunderstood him about spaces. It seemed to him that the treatment of an interior was very much like the painting of a picture: one must have the whole thing set up, so as to put the colours on, and then to accentuate or eliminate just as was felt consistent with the scheme of decoration. His feeling was that the pictures placed in these spaces should be decorative in themselves; they should have the elements of decoration—that is to say, the feeling for style. That was a very difficult thing to explain; but some pictures had that fine and indescribable character of distinction. He did not mean in his Paper that the architect should allot a settled number of geometrical shapes, but that he might allot the decorating artist an interior to do the best he could with—which would not interfere with the architect's mouldings or with his scheme of permanent material. The work should be carried out very much in the same way that Phil May worked on his drawings: he accentuated and eliminated until he got the drawing perfect in expression. But surely there was no scheme of decoration that could be laid down perfectly before the work was begun. One must have the actual spaces to work upon, so that one could strengthen, and add colour, and do all kinds of things, so as to get it to unite and come together.



REVIEWS.

THE MISTRESS ART.

The Mistress Art. By Reginald Blomfield, A.R.A., M.A., F.S.A., Hon. Fellow of Exeter College, Oxford, Professor of Architecture in the Royal Academy; Author of "A History of Renaissance Architecture in England," "Studies in Architecture," "The Formal Garden in England." 80s. Lond. 1908. Price 5s. net. [Edward Arnold.]

Photographs of beautiful buildings have an eloquence which tickles the ears of learned and unlearned alike; sumptuous publications in which the illustrations are adorned with dainty frills of letterpress have a genuine value of their own; still one is very ready to welcome a work on architecture, such as Mr. Blomfield's book is, which, beyond being unexceptionably got up, makes no concession to the eye, but appeals purely to the intelligence, and that with a force which comes of clear thinking and definite pronouncements.

Mr. Clausen in his Academy Lectures showed that he had an individual outlook on his art, that there was something which he felt wanted explaining, that he had, in fact, done his art the compliment of thinking about it while he practised it. Mr. Blomfield's lectures belong to the same category. He has thought, and thought clearly, and he has, as one would expect, the courage of his opinions. More than this, he brings the open mind to the consideration of, I had nearly said, every phase of his art, but I must except Gothic; he does indeed do a little conventional lip-service to the mediæval stock, but when he has uttered the words "Modern Gothic" he appears to feel that he has fired the heaviest shot in his locker. The why and wherefore, putting aside personal prejudice, is not quite clear. Gothic has its limitations, and must be very dull of apprehension if it has not learnt its place by now, but every Neo-Classical building is not good, nor is every modern Gothic building Strawberry Hill. The fact remains that Batty Langley, Capability Brown, and the chastened exponents of Gothic to-day are Mr. Blomfield's bugbears. On the other hand he does not mind finding good qualities in quarters where others resolutely shut their eyes to them. He would not admit, for in-

stance, that Vanbrugh was adequately summed up in the now hackneyed lines which the mere whisper of his name inevitably brings up, nor is he contented to dismiss decadent art out of hand without looking to see for himself whether it is really as bad as it sounds. There is beauty in decay, and Mr. Blomfield finds stray passages of the beautiful in decadence. Architecture, as we all know, was once upon a time the "Mistress Art," as Mr. Blomfield calls it, but his title is not there merely to hit the public in the eye, but because it is actually the text of his discourses, and the student is warned that he must fit himself by his own right bearing towards his art and by the completeness of his equipment to substantiate its claim to pre-eminence. On this subject the writer has many reasonable things to say, with which to-day few will quarrel, so completely, in the sphere of architecture, do the heresies of one generation seem to become the established religion of the next; glamour of associations, glamour of age, perfect conformity to the canons of design—all these and other qualities like them the student is told ruthlessly to tear away from the building which he is analysing—and his education should come chiefly in this way and not through books—till it stands without a shred of clothing but its own beauty. This is a test which many old buildings will not stand, and the middle-aged man feels a mild shock when this is brought home to him, so completely convinced was he in his early years that within limits the early builders were impeccable. There was a time, too, the period when at the sound of Ruskin's silver trumpet Neo-Classical walls reeled and fell, when art and morality were held to be closely bound together. Now we are told that morality has been divorced *a mensa et thoro*, or rather that the marriage was never other than a fond imagination, and that art cannot be stated in terms of morality. But is it so certain that there is no connection at all between the two? Take the case of a sister art to which Mr. Blomfield is never tired of referring—music. Does not the orchestral accompaniment to the Venusberg Episodes usher us in a wonderful way into a world where guilty pleasure sits enthroned? and do not

certain architectural forms make an appeal, far less direct and forcible of course, to the lower side of our nature? This is not to make the old mistake which would look for a driver as fat as his oxen, or to say that austere designing connotes austerity in the designer, or unregulated imaginings the debauchee; still there are buildings which one might imagine a Milton had fathered, and others which smack of the erotic poets.

Mr. Blomfield writes in an interesting way of the gradual intrusion of temperament into an art which for thousands of years had been hieratic, impersonal, a heritage which was received whole and handed down whole, modified by imperceptible changes, by the mere passing of ages, themselves a symbol of permanence, varied neither by individuals nor even consciously by peoples. It was the sense of the impersonal note in early architecture which, fifty years ago, led to the view, held by many, that, just so far as the individual hand was shown in a building, to that extent the building was debased. It is true that architecture is probably never fuller of personal cranks than it is in periods of decadence; but this was, as Mr. Blomfield says, individuality of detail rather than of architectural forms, and the individuality of the artist who has come to his own, the master who triumphantly realises in his work a great and compelling personality, an Alberti, a Peruzzi, was not to come till the Renaissance had reached maturity: If personal expression of this sort is a sin against morals, so much the worse for morals.

The third and fourth lectures deal respectively with the question whether or not the architect is to be the craftsman, and with the spheres and limitations of the arts. In the first case Mr. Blomfield decides, almost *à contre-cour*, but with no qualification whatever, that the architect is not, and, must not be, the master craftsman, but the master of the craftsmen. He must not labour at an oar if he is responsible for the safe passage of the craft through the rapids, but must hold the tiller-ropes and keep a watchful and undistracted eye on his goal. The master is seen at work, as Mr. Blomfield thinks, at St. Paul's, and we may gauge the salutary nature of the influence by comparing Grinling Gibbons's work there with what we know of it elsewhere where his hands were certainly free.

Of Plato, of Aristotle, and Lessing's "Laokoon," and of the fallacies exploded in that book, Mr. Blomfield writes with learning. Till Lessing's time, even the most intelligent of critics, like Diderot, mixed up the subject matter of poetry, painting, sculpture, and even the stage, in a hope-

less way. It would be too much to say that this confusion is quite unknown even now, programme-music is a case in point; but at least most trained artists will be at one with the writer when he concludes that "the vital touchstone of any art is that what it does can only be done by that one particular art."

With the second half of the book, which is devoted to a consideration of the "grand manner" in architecture as exemplified in Egypt, in Greece, at Pergamos, in Rome, and in France, we can only deal very summarily. The grand manner is more than once defined: "Scale, orderly distribution, a certain abstract and impersonal simplicity of treatment which relies on its fidelity to large conceptions rather than on wealth and intricacy of detail," are the essentials, and "scale" of course does not mean "size," since Newgate, now unhappily destroyed, was beyond all contradiction an exemplar of all the fundamental qualities here posited. In these concluding lectures the writer's appreciative tolerance and liberality are very apparent: whether it be Egypt, with its appeal to our sense of awe; Greece, with its appeal to our sensibility to beauty; Pergamos, the earliest home of systematised distribution and arrangement of masses, of planning regarded not as a single problem but as part of a comprehensive scheme; Rome, compelling materials to her will, yoking nature itself in her passion for dignity, for magnificence, for all that goes to the making of a world-capital (what would Trajan have thought of the Strand improvement?); France, with her exquisite and instructive feeling for what is right and congruous, her logical, orderly intelligence, heir in part to the qualities of both Greece and Rome—in each and all of these Mr. Blomfield finds examples of that masterly handling which, however varied its manifestations, is fundamentally one—examples for students of art to absorb and reproduce, for those in whose power lies the making or marring of our cities to take to heart.

Mr. Blomfield always writes well, and in a special branch, a difficult one, the picturesque and detailed presentment of a building, so that the reader may easily picture it in his mind's eye, is, as always, particularly happy. In such a pen-picture as his broad and illuminating description of the temple of Karnak he seems to make necessary some qualification of his own dictum as to the distinction existing between the subject-matter of the various arts. Here the pen appears to have annexed very completely some part of the domain of her sister-sovereign the brush.

A. E. STREET [F.].

LONDON BUILDING ACTS.

The London Building Acts 1894 to 1908. Second Edition, revised and enlarged, with Supplement containing the London Building Acts Amendment Act of 1908 and Digest of Law Cases 1905 to 1908. Edited by Bernard Dicksee, F.R.I.B.A. 8s. Lond. 1908. Price 10s. net. Edward Stanford.

The recent amendment by the London County Council (General Powers) Act, 1908, of the provisions of the London Building Acts, principally as to cubical extent and uniting of buildings, has necessitated the issue of a modified edition of Mr. Dicksee's now well-known treatise on the London Building Acts. The Act only received the Royal Assent on the 1st August last, and both author and publisher are to be congratulated upon the prompt issue of the notes upon the new enactment. The sections of the new Act, so far as they affect the building public, are set out in the form of a supplement to the second edition previously issued in 1906, and it is to these new sections that one naturally turns for an indication of the probable effect of the amendments upon the building law of London. The course followed has been the same as that adopted in previous editions—to print the sections of the Act in full, followed by the author's notes in smaller type. Probably there is no one better conversant with the vagaries of the London Building Acts than Mr. Dicksee, and the notes, though brief, are therefore of special value. Legal decisions are noted wherever possible, and the cross references to other sections of the Acts will be found particularly useful.

For purposes of comparison the repealed sections of the older Acts are also in many cases printed. This may appear at first sight an unnecessary addition, but it possesses the advantage of enabling one to see at a glance the essential differences in the two enactments. The Supplement also contains extracts from the Factory and Workshop Act 1907, and a copy of the suggested requirements of the London County Council under the Factory and Workshop Acts 1901 and 1907, and London Building Acts (Amendment) Act 1905, as to means of escape in case of fire. A very useful digest is also appended of the leading law cases decided in the High Court since 1905. A list of district surveyors and their districts also appears at the end of the book. Although dated September 1908, however, there are already several alterations to be chronicled owing to the readjustment of districts which has taken place recently.

The appearance of red printed slips in two places drawing attention to the repeal of Sections 75, 76, and 77 of the London Building Act 1894, and of the Factory and Workshop regulations published in the previous edition, emphasises the fact that the building law of London is still in an unsettled state; and with yet further legislation in prospect it

becomes increasingly important for architects and other professional men having the charge or supervision of building property to keep their legal information abreast of the times.

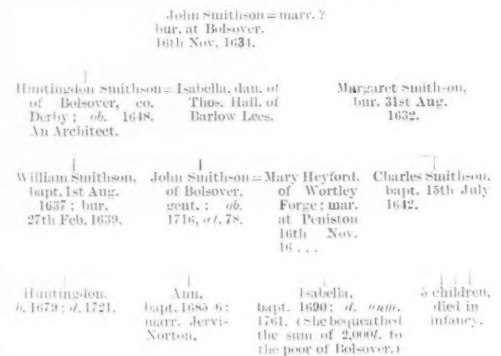
WILLIAM R. DAVIDGE [A.].

THE SMITHSON DRAWINGS.

John Smithson.

Mr. Gotch, in his interesting paper on House Design in the Reigns of Elizabeth and James I., read on 16th November, raises the question as to the individuality of John Smithson, whom he conjectures must have existed, as some of the Smithson drawings which were kindly lent by Colonel Coke to illustrate his paper are signed "Jo. S."

I have just come across a pedigree of the Smithson family in the Harleian Society's publications, vols. 39 and 40, *Familie minorum gentium*, which I think solves the problem, and as it may be of some interest at this moment I give it below.



This pedigree gives two John Smithsons, one the father and the other the son of Huntingdon Smithson. Of these two, the signatures on the drawings, bearing dates between 1599 and 1632, cannot be that of the latter, as he was not born until 1638; and we may therefore conclude that they are that of the father of Huntingdon, who died in 1634.

With regard to the question, Who was the architect of the buildings at Welbeck and Bolsover? Horace Walpole, in his *Anecdotes of Painters in England*, 3rd edition, 1782, states definitely that "John Smithson was an architect in the service of the Earls of Newcastle. He built part of Welbeck in 1604, the riding house there in 1623" (in footnote "As appears by his name over the gate") "and the stables in 1625; and when William Cavendish, Earl and afterwards Duke of Newcastle, proposed to repair and make great additions to

Bolsover Castle, Smithson, it is said, was sent to Italy to collect designs."

He also states that Smithson died in 1648; and at the end of the notice says, "His son, a man of some skill in architecture, was buried in the same grave." There seems, however, in both these remarks to be some confusion between the two persons John and Huntingdon.

Samuel Pegge, the antiquary, in his letter descriptive of Bolsover Castle addressed to the Duke of Portland, 26th September 1785, says that Huntingdon Smithson, who was living at Bolsover in 1601, was its architect, and, referring to Walpole's account, says that by mistake he called him John. I do not, however, think that Pegge's correction is convincing, as Huntingdon's (presumed) first-born, William, was not born until 1637; and although Huntingdon might have been living in 1601, it is not very probable that he was old enough to have been an architect in practice at that date.

The conclusions which I would therefore suggest, firstly, from the evidence of the signatures on the drawings, and, secondly, from Walpole's remarks,* and especially the footnote thereto, are that John Smithson the elder was the architect of these buildings, that his son Huntingdon was associated with him in his practice and completed various works after his father's death, and that he was eventually credited with being the architect of them.

With regard to Robert Smithson's relationship to the Bolsover Smithsons, his epitaph at Wollaton states that "he lived in the faith of Christ 79 years, and then departed this life the 15th of October, A.D. 1614." He was therefore born in 1535, whilst William, the firstborn of Huntingdon, was born in 1637, an interval of 102 years; and assuming Robert to have been the father of John Smithson the elder, this interval would allow of three generations of an average of thirty-four years each, which would render this relationship quite practicable.

WALTER L. SPIERS.

* It should be borne in mind that Walpole's anecdotes are transcriptions of George Vertue's notes made during his lifetime, 1684-1756, an earlier and greater antiquary than Samuel Pegge.



9 CONDUIT STREET, LONDON, W., 19th December 1908.

CHRONICLE.

The Illustrations to Mr. Spence's Paper.

A large and interesting collection of drawings, cartoons, photographs, &c., illustrating notable examples of the decorator's art, was exhibited by Mr. T. R. Spence in the Institute Meeting-room on the occasion of his Paper last Monday. The collection included some fine engravings of Sir Lawrence Alma-Tadema's pictures, lent by Messrs. L. H. Lefèvre & Son; drawings of decoration by Professor Gerald Moira; photographs of panels for the Victoria and Albert Museum by Mr. Alfred Drury, A.R.A.; photographs of coloured sculpture by Mr. Anning Bell; designs by Mr. Frank Salisbury; a wall frieze in linen by Mr. Herbert A. Bone; wood-carving by Mr. W. Aumonier; drawings by Mr. A. J. Dix and Mr. Emery Walker; specimens and drawings by Mr. Longden, and several examples of frieze and other decorations, the author's own work, including cartoons of stained-glass windows at Birmingham University.

Other illustrations were a series of Arundel prints, kindly lent by Mr. J. D. Crace [*H.A.*], illustrating the interior of the Library of Siena Cathedral; fresco by Masaccio and Filippino Lippi in the Brancacci chapel of the Church of the Carmine at Florence; fresco by Razzi (Sodoma) in San Domenico at Siena; fresco by Andrea del Sarto in the Convent of the Annunciata at Florence; paintings in the church of SS. Nazario e Celso at Verona. Also coloured drawings by Mr. Crace of the ceiling of the stanza of "the School of Athens" by Sodoma; a ceiling in the Villa Madama by Raphael; ceiling of chapel in the Palazzo Vecchio, Florence, by Ridolfo Ghirlandajo; decorations of the Palazzo Doria, Genoa, by Pierino del Vaga; ceiling under gallery in church of Santa Maria dei Miracoli, Venice; and ceiling of sacristy, by Paul Veronese, in S. Sebastiano, Venice.

After the reading of the Paper Mr. Spence showed a series of about a hundred slides representing famous examples of various kinds of decorative work in Florence, Rome, Milan, Padua, Mantua, Burgos, Fontainebleau, and several of modern work.

The Wellington Monument in St. Paul's.

No definite information has so far been vouchsafed respecting the proposals of the Dean and Chapter of St. Paul's with regard to the completion of Stevens's Wellington monument in the Cathedral, and the matter is now, at the instance of the Art Standing Committee, under consideration by the Institute Council.

Mr. John Belcher, A.R.A., in a letter to *The Times* (reprinted in the *JOURNAL* for the 7th November) stated that the present condition of the monument is a cause of some anxiety, and he referred to the vagueness of the Dean and Chapter's proposals for completion and to the ignorance of the public as to what is intended to be done. He urged too that all matters relating to the monument should be placed before the public, and that endeavour should be made to collect the original sketches and studies which were furnished by the artist for his work.

The Bishop of Stepney's reply to Mr. Belcher, and the latter's rejoinder, are reprinted below from *The Times* of the 9th and 14th November respectively:—

2 Amen Court, St. Paul's, E.C.: 7th November.

SIR,—With regard to Mr. Belcher's letter in *The Times* of 29th October, may I make two remarks on behalf of the Dean and Chapter of St. Paul's?

First, as to the strength and stability of the monument, all the facts are well known to the Dean and Chapter and have been carefully considered. Every care will be taken that the completion of the monument shall not affect its stability.

Secondly, in order that the public, and especially all who are interested in the work of Alfred Stevens, might have every opportunity of seeing the model of the equestrian figure and pediment, ample notice was given in the Press last December that it would be placed *in situ* in the Cathedral. It remained there open to public inspection for two months. No adverse criticisms were received. Further, before finally deciding as to the position of the figure and the design of the pediment, the Dean and Chapter had the opportunity of considering all the information which the late Mr. Stannus was able to give, and all the available original drawings of Stevens. Their decision was based upon these materials. It was only made in May, five months after the model had been exposed to public inspection. It will be recognised that it is too late now to reopen a discussion for which full opportunity was given during these months.—I am, &c.,

C. G. STEPNEY.

20 Hanover Square, W.: 11th November.

SIR,—The Bishop of Stepney, in his reply to my letter on the completion of the Wellington monument, confirms my statement that the public are in ignorance of the decision of the Committee.

This decision, we learn, "was only made in May," and he adds, "before finally deciding as to the position of the figure" and the design of the pediments the Dean and Chapter made an examination of the available original drawings of Stevens.

What, then, was this decision? Was it to omit the equestrian figure altogether? Or was it to raise it, or

reverse it? It was to decide upon these and other points that the model was placed in position.

Reference is made to "the design of the pediment." This may be a misuse of an architectural term, since no alteration of the pediment has been indicated.

We have the Bishop's assurance that every care to preserve the stability of the monument will be taken, and it would be satisfactory to know what expert advice will be taken.

It is not with a view to open discussion that this letter is written, but rather because it is not yet too late to prevent damage being done to this important national monument.—I am, Sir, yours faithfully.

JOHN BELCHER, A.R.A.

Tribute to the late Augustus Saint-Gaudens.

A special feature of the convention of the American Institute of Architects held during the present week has been an exhibition organised by that body of the sculptural work of the late Mr. Augustus Saint-Gaudens. On the 15th inst. the convention was made the occasion of a Memorial Meeting held by the American Institute as a tribute of respect and of appreciation of the fame of the distinguished sculptor. The proceedings at the function were rendered additionally impressive by the reading of addresses from the principal art societies throughout the world, bearing testimony to the late sculptor's genius and to the universal admiration with which his work is viewed.

The following address, drawn up by a committee of the Sculptor Hon. Associates R.I.B.A., was forwarded on behalf of the Institute:—

"The Royal Institute of British Architects beg to offer to the American Institute of Architects their sincere sympathy in the great loss which art has sustained by the death of Augustus Saint-Gaudens.

"The sculpture of Saint-Gaudens is justly admired by artists all over the world, but nowhere is his beautiful and poetic work better known and appreciated than in England, where his death created the deepest regret.

"To the American people has been bequeathed a rich heritage of splendid sculpture, and to the history of modern art a great name."

The Housing and Town Planning Bill.

The Committee stage of the Housing and Town Planning Bill was completed on the 3rd inst., and the Bill was ordered to be reported to the House of Commons.

The second schedule sets out the matters to be dealt with by general provisions prescribed by the Local Government Board, including *inter alia* "buildings, structures, and erections."

Mr. Guinness moved at the last sitting to leave out the words quoted, because he objected to the municipal architect's being allowed to decide matters of elevation and architectural taste.

Mr. Burns opposed the amendment, and said the object of the words in question was to enable

the local authority to prevent the erection of buildings that not only were an abomination in themselves, but depreciated adjoining property. There were instances of private architecture that ought to have been controlled by the County Council, and, he believed, would have been prevented had it been possible, with the approval of every private owner of adjoining property.

The amendment was defeated by 28 to 6.

Mr. Burns accepted a proposal by Mr. Morrell to bring within the purview of the schedule "the preservation of objects of historical interest or natural beauty," and the amendment was agreed to.

An amendment brought forward by Mr. Morrell sought to give persons representing architectural or archaeological societies or otherwise interested in the amenity of a scheme an opportunity of being heard at the preliminary stage. It was pointed out that architects and others interested in architecture set great importance on getting the best opinion to bear on the local authority at the earliest possible moment. A local authority might be influenced in favour of a certain owner, and the proposal would provide some protection against jobbery and favouritism.

Mr. Vivian supported the amendment in the interests of economy.

Mr. Burns said that the Local Government Board would do their best to see that architectural and artistic societies of repute should have all the power of representation which they sought to obtain, but he objected on grounds of procedure to their necessarily being brought in before a public inquiry was held. He proposed that they should have their opportunity in connection with the hearing of objections and representations by persons affected.

Several members expressed sympathy with the amendment, but Mr. Burns declined to go further, and Mr. Morrell withdrew his amendment in favour of the alternative suggestion of Mr. Burns, which was agreed to.

Since the above was reported, it has been decided to abandon the Bill for this Session and to reintroduce it early next Session.

Gift for Town Planning.

Mr. W. H. Lever, M.P., has made an offer, through Professor C. H. Reilly [A.], to the School of Architecture of Liverpool University to enable that body to undertake a systematic study of town planning, including all architectural aspects of civic design. The details of the scheme have not yet been definitely determined, but Mr. Lever has offered a sum of £500 to be spent in sending a commission abroad to collect information with a view to publishing a report. When this has been done Mr. Lever has further offered, for three years in the first instance, a sum of not less than £500 and not more than £1,000 a year, as may be needed, for

continued research and instruction. It is hoped when the time comes that a short course of study will be organised for advanced architectural students and architects in practice, especially for those who desire to obtain municipal employment as town surveyors or architects.

Design in the Constructive Arts.

In the last issue of the JOURNAL mention was made of the series of lectures on preliminary design in the constructive arts which the Carpenters' Company are arranging to give in their Hall in the early months of the New Year. The lectures are intended primarily for craftsmen and those engaged in trades directly connected with the constructive arts, but all persons of either sex and of any trade or profession are invited to attend. At the end of the course six prize competitions are to be instituted among those who have attended not less than eight lectures. Four will be open solely to craftsmen and others who are actual workers in their respective trades and who are not professionally engaged in any architect's or designer's office. Two of the competitions will be open to anyone, irrespective of occupation. Good design will receive more consideration than skill in draughtsmanship, i.e. design thoroughly appropriate to the material dealt with. The subjects of the competitions will be announced later. The following is a syllabus of the lectures:—

Jan. 13, 20, 27: Reason in Building: or, The Common Sense Use of Materials, by Mr. R. Weir Schultz.

WOODWORK.

Feb. 3: The Historical Growth of Design, by Mr. E. Guy Dawber [F.].

Feb. 10: The Influence of Materials on Design, by Mr. F. W. Troup [F.].

Feb. 17: The Influence of Tools on Design, by Mr. A. Romney Green.

DESIGN AS APPLIED TO COMPLETED WORK.

Feb. 24, Mar. 3: Ideas in Things, by Mr. Chas. F. A. Voysey.

Mar. 10: Ideals in Building—False and True, by Mr. M. H. Baillie Scott.

Mar. 17: House and Church Furniture, by Mr. Chas. Spooner [F.].

Mar. 24: Decorative Plaster Work, by Mr. Laurence A. Turner.

Mar. 31: External Lead Work, by Mr. F. W. Troup [F.].

April 7: Decorative Iron Work, by Mr. J. Starkie Gardner, F.S.A.

The Smoke Nuisance and its Prevention.

In view of the Paper on "Smoke Abatement," to be read at the Institute this session by Sir Wm. Richmond, it will be of interest to note the precautions which are taken on the Continent, and particularly in Holland, to combat the nuisance. In the province of Zuid-Holland, for example, it has been decreed that only coke is to be used on locomotives, which, even under those conditions, must be provided with a smoke-consuming apparatus and with means to prevent the emission of

sparks and combustible matter. For all locomotives purchased in Holland the company has to furnish to the Supervising Board of Railways a statement containing, among other matters, a description of the contrivance for the burning of smoke, and before the engines can be placed in service they are examined by a Government inspector. The consumption of bituminous coal, either by locomotives or stationary furnaces, is not tolerated. No building can be erected without licence from the town council, and permission can be refused if a proposed building is likely to create a nuisance by the emission of smoke. Any person concerned may file an objection, the legal procedure being provided by law. Such drastic measures would not be likely to succeed in London, where manufacturers already appear to have sufficient inducement to migrate to the provinces: yet it is doubtful if possible loss in this direction would not be amply balanced by the gain to health, and in the saving effected by the abolition of the need for so much artificial light during that part of the day when the sun is near the meridian.

District Surveyorships: Recent Alterations.

The London County Council at their meeting on the 17th November 1908 agreed, on the recommendation of the Building Act Committee, to the following alterations in the appointments of District Surveyors and readjustment of several districts, as from and including 1st January 1909:—

- (a) Mr. Wilfred John Harcastle [F.], at present District Surveyor for Battersea, Central, to be District Surveyor for Finsbury.
- (b) Mr. Herbert Alfred Legge [A.], at present District Surveyor for Hackney, West, to be District Surveyor for Fulham, the present districts of Fulham, South, and Fulham, North, being now united.
- (c) Mr. Albert Perkins Stokes, at present interim District Surveyor for Fulham, North, to be District Surveyor for Battersea, Central.
- (d) Mr. John Albert Gill Knight [A.], at present District Surveyor for Fulham, South, to be District Surveyor for Hackney, West.
- (e) Mr. Ernest William Lees [A.], at present District Surveyor for Lewisham, East, to be District Surveyor for Hackney, North-East.
- (f) The district of Lewisham, East, to be added to the district of Lewisham, West, and the district to be now known as Lewisham: Mr. William Robert Davidge [A.], District Surveyor.
- (g) So much of the district of the City of London, South, as is eastward of Queen Street to be added to the City of London, East: Mr. John Todd, District Surveyor.
- (h) So much of the City of London, South, as is westward of Queen Street to be added to the City of London, West: Mr. Christopher William Surrey [A.], District Surveyor.
- (i) The portion of the City of London, East, westward of Queen Street and southward of Cheapside to be added to the City of London, West.

Amendment of the London Building Act.

The London County Council have decided to seek legislation next Session on the subject of buildings constructed of iron, or steel, or of reinforced concrete. At their meeting last Tuesday they had under consideration the subjoined proposed amendments of the London Building Act, and they have decided to introduce into Parliament early next year the General Powers Bill which it is understood includes these proposals.

PART V.

27. In this part of this Act the expression "the principal Acts" means the London Building Acts 1894 to 1908.

28. Words and expressions used in this part of this Act shall, unless the context otherwise requires, bear the meanings assigned to them in the principal Acts, and those Acts and this part of this Act may be cited together as "The London Building Acts 1894 to 1909."

29. Notwithstanding anything contained in the principal Acts requiring buildings to be enclosed with walls of the thicknesses and of the materials therein respectively described, it shall be lawful to erect buildings of iron or steel skeleton construction subject to the provisions of this section, but buildings so erected shall (subject to any exemptions contained in the principal Acts or any of them) be subject to and comply with all such provisions of the principal Acts, or any of them, and any by-laws made or in force thereunder as may not be inconsistent with or contrary to the provisions of this section. The following are the provisions which shall apply in respect of the construction of such buildings:—

- (1) All rolled steel used in such construction shall comply with the British Standard Specification for structural steel for bridges and general building construction.
- (2) The skeleton framing of a building shall be capable of safely and independently sustaining the whole dead load and superimposed load bearing upon such framing.
- (3) The pillars (which expression wherever used in this section, unless otherwise stated, means metal pillars, and includes all columns and stanchions or an assemblage of such columns or stanchions properly riveted or bolted together) supporting all iron or steel girders which carry walls, floors, or roofs shall be of iron or steel, and shall be completely enclosed and protected from the action of fire by a casing of brickwork, terra-cotta, or concrete. Such casing shall, towards the exterior surfaces of the enclosing walls of the building, be at least 8½ inches thick, and on all other surfaces of such walls at least 4 inches thick, the whole being properly bonded together.
- (4) All iron and steel girders (except girders in floors and staircases) shall be similarly cased with brickwork, terra-cotta, or concrete not less than 4 inches thick, properly tied and bonded to the remaining work, but the edges of the flanges of the girders and plates and angles connected therewith may approach within 2 inches of the surface of the casing.
- (5) The compression flange of every girder shall be secured against buckling whenever the length of the girder exceeds thirty times the width of the flange.
- (6) The span of a girder shall not exceed twenty-four times the depth of the girder, unless the calculated deflection of such girder is less than one four-hundredth part of the span.
- (7) All girders which carry walls or floors or roofs shall be of wrought iron or mild steel.
- (8) Wherever two or more girders or joists are arranged

alongside one another, and are intended to act together in supporting a wall or any other load, they shall be fixed together by means of cast-iron separators and bolts, or by riveted plates, or in any other equally efficient manner which may be approved by the District Surveyor. Separators shall not be more than 5 feet apart, and shall be placed immediately over all supports and immediately under or at all concentrated loads.

(9) All girders for supporting the enclosing walls shall be placed at the floor line of each story, or at a distance of not more than 4 feet above or below such floor line.

(10) Rivets shall be used in all cases where practicable, but where bolts are used the ends shall be burred over. The distance from the edge of a rivet hole or bolt hole to the edge of the plate bar or member shall not be less than the diameter of the rivet or bolt. Rivets shall be so placed that their centres shall not be further apart than sixteen times the thickness of the thinnest plate bar or member through which they pass, or closer together than three times the diameter of the rivets. The pitch of rivets shall be measured in a continuous straight line, and such straight line pitch shall not exceed sixteen times the thickness of the thinnest plate bar or member through which they pass, or be less than three times the diameter of the rivets.

(11) No enclosing wall of the building shall be less than $8\frac{1}{2}$ inches in thickness for the topmost 20 feet of its height, or less than 13 inches in thickness for the remainder of its height below such topmost 20 feet, provided that the window backs may in all cases be $8\frac{1}{2}$ inches in thickness. Provided also that a less thickness shall be allowed in any case in which under the London Building Act 1894 such less thickness is prescribed.

All party-walls shall be of the thicknesses prescribed by the principal Acts.

In any case in which an enclosing wall, or portion of an enclosing wall, is not supported or carried or secured by iron or steel frame construction within the limits of height and length prescribed by the first schedule to the London Building Act 1894 for the purpose of determining the thickness of walls, such enclosing wall or portion of enclosing wall shall be of a thickness not less than that prescribed by such schedule.

(12) All brickwork and concrete shall be executed in Portland cement mortar, and shall be bedded close up to the iron or steel without any interfering cavity, and all joints shall be made full and solid. The cement so used shall be in accordance with the British Standard Specification. Nothing in this section shall prevent the use of stone as an external facing for buildings, provided that all work faced with stone shall be at least 4 inches thicker than the thickness prescribed by the last preceding subsection of this section, and shall have a backing of brickwork not less than $8\frac{1}{2}$ inches in thickness.

(13) (a) No steel or wrought-iron pillar shall in any part be less than $\frac{1}{4}$ inch thick, nor shall any such pillar have an unsupported length of more than thirty-five times its least width, or more than 140 times its least radius of gyration.

(b) The ends of all such pillars shall be at right angles to the axis.

(c) All joints in such pillars shall be close-butt with cover-plates, properly riveted, and unless unavoidable no joint shall be made in a pillar except at or as near as may be reasonably practicable to the level of a girder properly secured to such pillar.

(d) The foot of every such pillar shall have a proper base-plate riveted thereto, with sufficient gusset pieces to distribute properly the load on the foundations, and the gusset pieces shall have sufficient rivets to transmit the whole of the load on to the base-plates.

(e) Where any such pillars are built up hollow, the cavities shall either be filled up with cement concrete or be covered in at both ends so as to exclude the air.

(14) (a) The width of every cast-iron pillar shall be not less than 5 inches, and the metal of which such pillar is composed shall not be in any part of less thickness than $\frac{3}{4}$ inch, or one-twelfth of the least width of such pillar (whichever shall be the greater), and no such pillar shall have an unsupported length of more than twenty times its least width.

(b) The caps and bases of such pillars shall be in one piece with the columns, or be connected thereto with a properly turned and bored joint sufficiently fixed.

(c) The ends of all such pillars shall be at right angles to the axis.

(d) All joints in such pillars shall be at or as near as may be reasonably practicable to the level of a floor, and shall be fixed and made with not fewer than four bolts of not less diameter than the least thickness of metal in the pillar. If more than four bolts are used the diameter of the bolts may be reduced proportionately, but no bolts shall be less than $\frac{3}{8}$ inch in diameter.

(e) The base of all such pillars shall have such area as may be necessary to distribute properly the load on the foundations.

(15) In all cases of superimposed pillars the sectional area of the pillar shall be continued through the full depth of any transverse girder or joist interposed between the pillars, and may be made up by providing stiffeners of an aggregate sectional area not less than that of the superimposed pillar.

(16) (a) All floors and all staircases (together with their enclosing walls) shall be constructed throughout of fire-resisting materials, and be carried upon supports of fire-resisting materials.

(b) All iron and steel carrying loads and used in the construction of any floor or staircase, and all internal pillars, shall be protected from the action of fire by being encased to the satisfaction of the District Surveyor, and to a thickness of not less than 2 inches in brickwork, terra-cotta, concrete, metal lathing, and plaster or cement. Wood firings shall not be used in connection with any such facing.

(17) All structural metal work shall be cleaned of all scale, dust, and loose rust, and be thoroughly coated with one coat of boiled oil or paint before erection, and after erection shall receive at least one additional coat. Where such metal work is embedded or encased in concrete, Portland cement wash may be used in lieu of oil or paint.

(18) (a) The dead load of a building shall consist of the actual weight of walls, floors, roofs, partitions, and all other permanent construction comprised in such building.

(b) The superimposed load in respect of a building shall consist of all loads other than the dead load.

(c) For the purpose of calculating the loads on pillars (including for the purposes of this paragraph brick pillars), piers, walls, framings, girders, joists, and other constructions carrying loads in buildings, the superimposed load on each floor and on the roof shall be estimated as equivalent to the following dead load:—

For a domestic building (not being a building intended to be used wholly or principally as offices or a counting-house), or a building intended to be used wholly or principally as a hotel, hospital, workhouse, lodging-house, 70 lb. per square foot.

For a building intended to be used wholly or principally as offices or a counting-house, or as a school, college, or place of instruction, 100 lb. per square foot.

For a public building (not being a building intended to be used wholly or principally as a hotel, hospital, workhouse, lodging-house, school, college, or place of instruction), or a building intended to be used wholly or principally as a workshop or retail shop, 112 lb. per square foot.

For buildings of the warehouse class not less than 224 lb. per square foot; but if the superimposed loads exceed 224 lb.

per square foot such greater superimposed load shall be provided for pursuant to subsection (2) of this section. In every building of the warehouse class a notice shall be exhibited in a conspicuous place on each story of such building stating the superimposed load which may be carried on the floor of such story.

For a roof the plane of which inclines upwards at a greater angle than 20 degrees with the horizontal the superimposed load (which shall for this purpose be deemed to include wind pressure) shall be estimated at 28 lb. per square foot of sloping surface.

For all other roofs the superimposed load shall be estimated at 56 lb. per square foot measured on a horizontal plane.

(19) For the purpose of calculating the total load to be carried on foundations pillars (including for the purposes of this subsection brick pillars) piers and walls in buildings of more than two stories in height the superimposed loads for the roof and top story shall be calculated in full in accordance with the last preceding subsection of this section, but for the lower stories a reduction of the superimposed loads shall be allowed as follows:—

For the story next below the top story a reduction of 5 per cent. of the full superimposed load calculated as aforesaid.

For the next succeeding lower story a reduction of 10 per cent. of the full superimposed load calculated as aforesaid and for each succeeding lower story a further reduction of 5 per cent. of the full superimposed load calculated as aforesaid. Provided always that the total reduction in respect of any story shall not exceed 50 per cent. of the full superimposed load.

No such reduction as aforesaid shall be allowed in the case of a building of the warehouse class.

(20) All buildings shall be so designed as to resist safely a wind pressure in any horizontal direction of the following respective amounts:—

(a) Where the height of the building does not exceed four times the least width thereof, 30 lb. per square foot.

(b) Where the height of the building exceeds four times the least width thereof, a number of pounds per square foot equal to two and one half times the ratio of the height of the building to its least width at the ground level added to twenty. Provided that it shall not in any case be necessary to provide for resisting a wind pressure of more than 50 lb. per square foot.

(21) The working direct stresses on pillars of cast iron or mild steel shall not exceed those specified in the two next following tables according to the several ratios therein specified, or a proportionate load for intermediate ratios:—

CAST-IRON PILLARS.

Ratio of Length in Inches to least Radius of Gyration in Inches	Working Direct Stresses in Tons per Square Inch of net Section		
	Hinged Ends	One End Hinged, One End Fixed	Both Ends Fixed
20	3.2	3.3	3.5
25	3.0	3.2	3.4
30	2.8	3.0	3.3
35	2.5	2.9	3.2
40	2.3	2.7	3.0
45	2.0	2.4	2.9
50	1.8	2.3	2.8
55	1.5	2.1	2.6
60	1.3	1.9	2.4
65	1.2	1.7	2.3
70	1.0	1.6	2.1

MILD STEEL PILLARS.

Ratio of Length in Inches to least Radius of Gyration in Inches	Working Direct Stresses in Tons per Square Inch of Section		
	Hinged Ends	One End Hinged, One End Fixed	Both Ends Fixed
20	5.0	5.0	5.1
30	4.8	4.8	4.9
40	4.4	4.5	4.7
50	4.0	4.2	4.4
60	3.5	3.9	4.2
70	3.0	3.5	4.0
80	2.6	3.2	3.7
90	2.3	2.9	3.5
100	1.9	2.5	3.2
110	1.6	2.3	3.0
120	1.4	2.0	2.7
130	1.2	1.8	2.4
140	1.0	1.6	2.2

(22) The working direct stresses on wrought-iron pillars shall not exceed five-sevenths of the stresses hereinbefore specified with respect to the working direct stresses on mild steel pillars.

(23) Where a pillar is built into a wall the least radius of gyration of that pillar shall be taken for the purposes of the tables referred to in subsection (21) of this section.

(24) The working stresses of iron and steel (except in the case of pillars as hereinbefore provided) shall not exceed the following:—

	Working Stresses in Tons per Square Inch			
	Tension	Compression	Shearing	Bearing
Cast iron	1.5	8	1.5	10
Wrought iron	5	4	4	7
Mild steel	7	7	5	10
Cast steel	5	10	7.5	15

(25) The pressures of foundations on the natural ground shall not exceed the following:—

	Tons per Sq. Ft.
Natural bed of soft clay, wet or loose sand	1
Natural bed of ordinary clay and dry confined sand	2
Natural bed of ordinary gravel	3
Natural bed of compact gravel, London blue clay and chalk	4

(26) The pressure on concrete foundations shall not exceed 12 tons per square foot.

(27) No disengaged brick pillar shall have a height greater than twelve times its least width.

(28) The pressure on brickwork shall not exceed the following:—

	Tons per Sq. Ft.
Blue brick in cement mortar	12
Hard brick (including London stock) in cement mortar	8
Common brick in cement mortar	5

(29) Any person proposing to erect a building of iron or steel skeleton construction shall not less than one month before the commencement thereof, deposit with the District

Surveyor a complete set of drawings of such building, showing the details of construction of all its parts, together with a detailed copy of all the calculations of the loads and stresses to be provided for, and particulars of the materials to be used. Should such drawings, calculations, or particulars be, in the opinion of the District Surveyor, not in sufficient detail, the person depositing the same shall furnish the District Surveyor with such further drawings, calculations, or particulars as he may require.

(30) The District Surveyor may, for the purpose of due supervision of the building, and at the expense of the owner of the building, cause any pillar to be drilled at any point to ascertain its thickness, and may cause to be made any other tests which he may consider desirable.

(31) All buildings in accordance with the foregoing provisions of this section shall be constructed to the satisfaction of the District Surveyor.

(32) Any person dissatisfied with any requirement or decision of the District Surveyor under this section may appeal to the Council, whose determination shall be final.

(33) It shall be lawful for the Council, in any case in which they think fit so to do, to modify or waive any of the requirements of this section, and to impose any terms and conditions upon any such waiver or modification, and any person failing to comply with any such term or condition shall be liable to a penalty not exceeding £20, and to a daily penalty not exceeding a like amount.

30. (1) The Council may make regulations with respect to the construction of buildings wholly or partly of reinforced concrete, and with respect to the use and composition of reinforced concrete in such construction, and for the purpose of framing such regulations may carry out such investigations and make such tests as they may deem necessary, and the provisions of this section and of any such regulations shall have effect, notwithstanding any provisions of the principal Acts or any of them, or any by-law made or in force thereunder which may be inconsistent therewith or contrary thereto.

(2) Subject to such regulations as aforesaid, buildings may be constructed wholly or partly of reinforced concrete, but except as provided by this section or by such regulations, buildings so constructed shall (subject to any exemptions contained in the principal Acts or any of them) be subject to and comply with all such provisions of the principal Acts or any of them, and of any by-laws made or in force thereunder as may not be inconsistent with or contrary to the provisions of this section or any regulations made thereunder.

31. For the purpose of securing the due observance of the provisions of this part of this Act and any regulations made thereunder, such provisions and regulations shall be deemed to form part of Part VI. of the London Building Act 1894 and any references in the principal Acts to the said Part VI. shall be construed accordingly.

32. Where more than one-half of the whole structure of any building consists of iron or steel skeleton construction or reinforced concrete, the fee to which the District Surveyor shall be entitled in respect of any of the matters referred to in Part I. of the third schedule to the London Building Act 1894 under the respective headings "On new buildings" and "On additions, alterations, or other works," shall be a fee exceeding by one-half the amount of the fee specified in that portion of the said part of the said schedule which precedes the proviso therein contained, and where any fee is increased under the provisions of this section, there shall be no further increase under the said proviso.

Early in the year 1904 the Institute, at the invitation of the London County Council, made a series of Recommendations showing the lines on which the London Building Act might be amended, and at the same time submitted certain regulations

for Skeleton Frame Structures which it was suggested should not be inserted in the Act, but treated as By-laws; or, if embodied in the Act, power should be reserved to vary them as experience proved to be necessary. These recommendations and suggestions, which were printed and sent to the London County Council, will be found in the JOURNAL for 6th February 1904, pp. 181-92.

Glastonbury Abbey : Preservation of the Ruins.

Glastonbury Abbey, which is to be handed over with ceremony next summer to the Archbishop of Canterbury and other episcopal custodians, is now under the care of Mr. W. D. Caroe, F.S.A., who is engaged in putting the ruins into such repair as will enable them to resist further decay and the destructive action of the weather. The examination of the Abbey had been made, and the proposals for repairing it decided upon, even before the final completion of the purchase. Immediately after that transaction, the scaffolding being already in position, the work of preservation was begun.

The Times a few days ago gave some particulars of the work proposed to be done. To begin with the Lady Chapel, popularly known as St. Joseph's Chapel, it has been decided to rebuild the lower parts of the missing turret at the south-west angle. Such reparations as are necessary will be made in stone from the same quarry and the same bed as those from which the stones were obtained which were used in the original work, and which have stood the weather so admirably. This is oolite from the Doulting quarries, a stone largely used in Somerset, especially at Glastonbury Abbey and Wells Cathedral. It was also used exclusively for Christ Church Cathedral in Dublin, a building of the same period—namely, the latter part of the twelfth century. The stones for the Dublin building were quarried in Somerset and conveyed to Ireland in boats. The Lady Chapel of Glastonbury Abbey, which is the most valuable remnant of the whole, as it is also the most intact, was built entirely in the short space of two years by King Henry II. at his own charges. The foundation-stone was laid in 1184, and the consecration took place in 1186. Where the dressed stone has been removed wilfully for use elsewhere, and the core of the wall exposed, to its detriment, new stone will be introduced in its place. Naturally this will generally be necessary in the lower parts of the building.

The Lady Chapel is at the west end, not at the east, where Lady Chapels are frequently found in such edifices. The arch at the east end of the Lady Chapel, which was inserted in the thirteenth century, at the time when the Lady Chapel was connected up to the west end of the great church by what is known as the Galilee, will be reinstated in order to give stability to this end of the building, which threatens to fall inwards. Care will be

taken to secure the various groin springers, which are at present in a dangerous condition.

The crypt of the Lady Chapel and the Galilee possesses peculiar interest, due to the fact that it was an insertion of the fifteenth century made in order to meet the needs of persons desiring to be buried in the Abbey in consequence of the alleged discovery of the grave of Joseph of Arimathea. This crypt has already been treated with the grouting machine—i.e. the walls have been consolidated.

Of the nave there remains only a small portion of the south wall. The vegetation will be removed from the top of the wall, which will be made waterproof.

The eastern tower piers present one of the chief difficulties in the way of preservation in consequence of the overhanging masonry. Various methods of dealing with these have been suggested, one of them being to re-erect the adjoining choir piers and arches. Unfortunately, however, no evidences remain of the exact form of these, as the original work was greatly altered by Abbot Monington in the fourteenth century. It was not considered advisable, therefore, to design piers which might, or might not, have been accurate reproductions of the ancient forms. A point of interest in connection with the choir is that it was glazed on its interior instead of on its external face at the time when the alterations were carried out by Abbot Monington. This is believed to be a unique instance of such a treatment. It has been found possible to support the overhanging masonry, to which reference has been made, from the lower parts of the piers themselves, and to add stability to the whole by filling in the circular staircases, which exist in the upper part of the piers and originally gave access to the central tower. The remaining walls of the chancel, which, again, are complete only on the south side, will be dealt with in the same way as the walls of the nave.

The Edgar Chapel, recently discovered by Mr. F. Bligh Bond, which makes the whole church by many feet the longest of the cathedrals or monastic churches of the country, will be dealt with so as to show its form and foundations. At present the whole of the ruins are surrounded by scaffolding, but it is hoped that all the work will be completed and the scaffolding removed by the early summer when it will be possible again to admire the beauty of the ruins.

The Excavation of Herculaneum.

The *Times* correspondent at Rome states that Commendatore Boni reports hopelessly on the present prospects of the excavation of Herculaneum. In accordance with the plan determined upon, a shaft two metres square has been already sunk to a depth of eighteen metres, or what is

calculated to be the road level of the ancient city. From the bottom of this shaft and from similar shafts dug elsewhere it was intended to carry radiating galleries to search for and expose the streets of Herculaneum. The shaft already made, which was equipped with electric light and a lift, now proves useless owing to the obstruction offered by the owners of surrounding houses. The unfortunate publicity given to Herculaneum and the extravagant accounts published of its possible treasures have so excited the expectations of the people of Resina that they will allow no excavation at any depth below their houses without the deposit of an exorbitant sum to represent their share value of the discoveries. It is useless, therefore, to sink new shafts or attempt further operations until the new law depriving landowners of any property in antiquities below the soil has been definitely passed, or a special law has been made similar to that already passed for the Zona Monumentale at Rome.

The Poster Competition.

The premium of one hundred guineas offered by Mr. H. Greville Montgomery, M.P., for the best design for a poster in connection with the forthcoming International Building Trades Exhibition, Olympia, has been awarded to Mr. George Denham, of Kensington, W., architectural student at the Royal College of Art. The adjudicators, Mr. Ernest George, *President R.I.B.A.*, Sir Aston Webb, R.A. [*F.*], and Sir George Frampton, R.A. [*H.A.*], were unanimous in their award. Some two hundred designs were sent in, and they will be exhibited at the next Building Trades Exhibition, 17th April to 1st May 1909.

COMPETITIONS.

South Bank-in-Normanby Town Hall, Market Hall Council Offices, &c.

Members of the Royal Institute are advised not to take part in the above Competition.

By order of the Council,

IAN MACALISTER,
Secretary R.I.B.A.

THE AUTUMN EXAMINATIONS.

The Preliminary.

The Preliminary Examination, qualifying for registration as *Probationer R.I.B.A.*, was held in London and the undermentioned provincial centres on the 9th and 10th November. Of the 147 candidates admitted, claims for exemption from sitting for the Examination were allowed to the number of 47. The remaining 100 candidates were examined, with the following results:—

District	Number Examined	Passed	Relegated
London	50	37	13
Birmingham	3	3	—
Bristol	7	5	2
Cardiff	7	3	4
Glasgow	1	—	1
Leeds	5	3	2
Liverpool	2	2	—
Manchester	19	13	6
Newcastle	6	4	2
	100	70	30

The passed and exempted candidates—numbering altogether 117—have been registered as Probationers. Their names and addresses are as follows:—

ALEXANDER: Walter; 29 Westbourne Gardens, Glasgow.
 ANNS: Kenneth; 2 Wellesley Grove, East Croydon.
 ARCHER: Herbert Humbley; Maylands, 29 Hill Road, Chelmsford.
 ARCHIBALD: Howard Moir; Ingram House, Stockwell Road, S.W.
 ARMSTRONG: Thomas Francis; Hawley, Dartford, Kent.
 ARNOLD: William Lionel Nugent; Kendall Villa, Lower Hillmorton Road, Rugby.
 ASKEY: Alpha Harry; 49 Barrett Road, Walthamstow.
 ATKINSON: Frank; The Ridge, Bingley.
 AYLWIN: Guy Maxwell; 8 West Street, Farnham.
 BASEVI: James; Ingram House, Stockwell Road, S.W.
 BATES: Cyril Francis; 3 Serpentine Road, Newport, Mon.
 BECK: Henry Berkeley; 6 St. Mary's Grove, Stafford.
 BELLAMY: Osmund; 3 Loveday Road, Ealing, W.
 BESWICK: Harry; Queen's Park, Chester.
 BOOTH: Allan Hodgson; 161 Keighley Road, Frizinghall, Bradford.
 BRIGHT: Arthur Kingsley; Lea Hurst, Mapperley Road, Nottingham.
 BROOKS: Archibald Buckley; The Manor House, Hale Barns, Cheshire.
 BROWN: Collings William; c/o C. E. Mallows, Esq., 28 Conduit Street, W.
 BUFFEY: Frederick Hubert; c/o Dr. T. G. Buffey, 18 Hutt Street, Hull.
 CAREY: Reuben Walter; 28 Quadrant Road, Canonbury.
 COURTNEY: Henry Gother; 1 Petersham Terrace, S.W.
 COX: William Douglas; 42 Southfield Road, Middlesbrough.
 CRAMPTON: Joshua; Arden House, Belmont Street, Southport.
 CREED: Richard, Junr.; 8 Gray's Inn Place, W.C.
 CROUCH: Frederick Alfred; 75 Portland Road, Hove, Brighton.
 CULLEINE: Harold; "Bridge House," Lugwardine, Hereford.
 DALY: Maurice Segrave; Ryelands, Caterham, Surrey.

DAVIES: William Edward; Cedar Bank, Liverpool Road, Chester.
 DAVISON: William Robert; Longhirst Brocks, Morpeth.
 DENNE: Lionel George Lewis; School House, King's School, Canterbury.
 DETMOLD: Frederick Guy; 6 King's House, St. James's Court, Buckingham Gate, S.W.
 DUNCAN: John; 25 Buccleuch Place, Edinburgh.
 EDWARDS: Arthur Trystan; 41 Parliament Hill Mansions, Highgate Road, N.W.
 ELSTON: James; Station Chambers, Foundry Bridge, Norwich.
 ELSWORTH: Lancelot Andrew; 139 Victoria Road, Headingley, Leeds.
 EMBERTON: Joseph; Church Street, Audley, North Staffs.
 FARNDEN: Herbert Arnold; Valetta, De Cham Road, St. Leonards-on-Sea, Sussex.
 FERGUSON: Cyril Harold; 6 Bewlay Street, York.
 FIELD: Wilberforce Anstey; Epworth House, Padliham, near Burnley.
 FRAME: Robert Sinclair; Coningsby Place, Alloa.
 HANBURY: Philip Henry; Trelawney, Combe Down, near Bath.
 HARDMAN: Cyril Ernest; 12 Manchester Road, Bury.
 HARRILD: Fred, Junr.; 10 Gray's Inn Place, Gray's Inn, W.C.
 HART: Edward Goyen; The Pound, Newnham-on-Severn, Gloucestershire.
 HAYWARD: Kenneth John; The Vicarage, Bruton, Somerset.
 HAZELL: Frederick Pusey; Chevington, Kingsbury Street, Marlborough.
 HEAL: Albert Victor; 7 Gray's Inn Square, W.C.
 HILL: Henry Oswald William; The Nook, Oughterington, nr. Lymm, Cheshire.
 HOLBROOK: Arthur James; Clyde Villa, Foreland Road, Bembridge, Isle of Wight.
 HOPE: William; 37 Beverley Terrace, Cullercoates.
 HOWCROFT: Gilbert Burlett; Spring Grove, Upper-mill, Oldham.
 HUGHES: Thomas Harold; Abbey House, Cobridge, Stoke-on-Trent.
 HUNT: Oliver Grahame; 7 Gray's Inn Square, W.C.
 INMAN: Gordon Henry Nisbet; c/o W. Campbell Jones, Esq., 32 Bedford Row, W.C.
 IRWIN: George Francis; 2 Alpine Terrace, Onchan, Isle of Man.
 JACKSON: Albert John; 2 Belvidere, Weymouth.
 JAVES: John Walter; Sunnyside, Princes Road, Ashford, Middlesex.
 JENKINS: Trevellyn Philip; Hawthorne Villa, Eaton Crescent, Swansea.
 JEPSON: Henry Norman; 431 Bolton Road, Darwen, Lancs.
 JOHNSON: Alexander Le Burn; Viewbank, Bamhill, Broughty-Ferry, Scotland.
 JONES: Thomas Anthony; 34 Manchester Street, Manchester Square, W.
 KNELLER: Walter Alfred; Claughton Lodge, Woolston, Southampton.
 LANGDALE: Arthur Hugh; School House, Tonbridge, Kent.
 LEWCOCK: George; 4 Clarence Terrace, Hampton Hill, Middlesex.
 LISTER: Charles Edward Langley; Burlington House, Hampton Hill, Middlesex.
 LONE: Reginald Wilcox; Glengildie, Montalt Road, Woodford.
 MACGREGOR: John Eric Miers; Stamford Brook House, Hammersmith, W.
 MACKENZIE: Frederick Wheatley; "Inchkeith," Broxbourne, Herts.

MACKENZIE: Kenneth Beaumont; North House, Lockwood, Huddersfield.
 MANLOVE: John Edward Davis; 19 Greville Road, Kilburn Priory, N.W.
 MARGETSON: Oliver; The Manor House, Blewbury, near Didcot, Berks.
 MARTIN: Cyril Frederick; Eyton, Farquhar Road, Edgbaston, Birmingham.
 MAW: Arthur Rogers; 107 Windsor Road, Oldham.
 MILLER: Herbert Cecil; Glencroft, Bath Street, Rugby.
 MOORE: Frank Allen; Knowle House, Knowle, Bristol.
 MOSSE: Philip Godfrey; 27 North Side, Clapham Common, S.W.
 NEEDHAM: Keith; Holly Bank, Werneth, Oldham.
 OLIVER: Ernest Edward; 4 Gladstone Street, Hartlepool.
 PATERSON: William; Verbena Villa, 3 Sciennes Gardens, Edinburgh.
 PAUL: Herbert Noël; Gunton Park, Norwich.
 PEASE: Alex.; Education Offices, Horsham, Sussex.
 PERKINS: Frederick William; 2 Cheeshill Street, Winchester.
 PETTIFER: Frederick Richard; 22 Beaumont Avenue, Richmond.
 PICKMERE: John Richard; Wychall Lane, King's Norton, Worcestershire.
 PRICE: Henry Wall; Park Villa, Compass Hill, Taunton.
 RAYSON: Thomas; 40 Kemerton Road, Camberwell, S.E.
 RICHARDS: Richard Russell; 31 Tyrwhitt Road, St. John's, S.E.
 ROBERTS: Arthur Beaver Llewelyn; 6 Carlyle Square, Chelsea, S.W.
 ROBERTS: William John; c/o Messrs. J. W. Beaumont & Son, 10 St. James' Square, Manchester.
 ROSS: William Alexander; 15 Highgate Avenue, Highgate, N.
 SAXON: Frederick Charles; 17 St. Albans Street, Rochdale.
 SHEPHERD: John Sunderland; 35 Hopwood Street, Barnsley, Yorks.
 SLATER: Martin Johns; 2 Market Place, Hadleigh, Suffolk.
 SMITH: Elfric Hubert; 13 Maidstone Road, New Southgate, N.
 SMITH: Hubert John; 45 Coleraine Road, Blackheath, S.E.
 SMITH: Robert Ronald Tate; The Gables, 30 Wentworth Road, York.
 SPOONER: Frank Philip; 10 Elsworth Road, South Hampstead, N.W.
 STREITBERGER: Philip; 6 High Street, Walthamstow, Essex.
 SURVEYOR: Merwanjee Framjee; Wellington Street, Dhobhi Talao, Bombay.
 SWINTON: James Gibson; 6 Viewbank Terrace, Clepington Road, Dundee, Scotland.
 TALVALKER: Vasudeo Ramchandra; 18 Tufton Street, Westminster, S.W.
 TAYLOR: Rowland Victor; Myton, 25 Curzon Road, Southport.
 THIRTLE: Tom Owen; 33 Grove Road, Norwich.
 THOMSON: Alexander Mitchell; Kenmore, Ferrier Street, Carnoustie, Forfarshire, N.B.
 TOPHAM: Geoffrey Ronald Gilbertson; 2 Dartmouth Place, Blackheath, S.E.
 TOWNLEY: Arthur Eric; Coyleigh, Oakfield Road, Selby Park, Birmingham.
 WALCH: James Bernard Millard; 21 Benslow Lane, Hitchin, Herts.
 WHITE: Theodore Francis Hunsford; 14½ Cavendish Place, Cavendish Square, W.
 WHITEHEAD: Percy; Court Street, Uppermill, near Oldham.
 WHITEHEAD: Thomas Gustavus; 1 Dunheved Road North, Croydon.

WILKINSON: Walter George; 13 Parkhill Road, Havestock Hill, N.W.
 WILLIAMS: John Hugh; 71 St. Domingo Vale, Liverpool.
 WILSON: James Mollison; Burnbank, Seafield, Broughty Ferry, nr. Dundee.
 WILSON: John William Gilmour; 5 Bloomsbury Mansion, Hart Street, W.C.
 WOOD: Herbert McGregor; 125 Kingsley Road, Liverpool.
 WOODHOUSE: Cecil Herbert MacKay; 96 New Walk, Leicester.
 WYATT: Philip Humphry; 15 Routh Road, Wandsworth Common, S.W.

The Intermediate Examination.

The Intermediate Examination, qualifying for registration as *Student R.I.B.A.*, was held in London and at the undermentioned provincial centres on the 9th, 10th, 12th, and 13th November. One hundred and fifty-two candidates were examined, and the results are reported as follows:—

District	Number Examined	Passed	Relegated
London	77	36	41
Bristol	6	4	2
Cardiff	5	3	2
Glasgow	4	2	2
Leeds	16	6	10
Liverpool	8	5	3
Manchester	24	11	13
Newcastle	12	5	7
	152	72	80

The names and addresses of the successful candidates are as follows, being given in order of merit, as placed by the Board of Examiners:—

[The initial "P." in the subjoined list signifies "*Probationer R.I.B.A.*"]

RAHBULA: Ernest Alexander Rahles [P. 1905]; 18 Grange Road, Barnes, S.W.
 BARLOW: George [P. 1906]; 23 Alexander Grove, Long-sight.
 ROBINSON: John Charles [P. 1907]; Barn Street, Marlborough.
 NORQUOY: James [P. 1901]; Oakley House, 7 Despenser Street, Cardiff.
 SLATER: John Alan [P. 1907]; 11 St. John's Wood Park, N.W.
 NIMMO: William Wilson [P. 1905]; 3 Osborne Terrace, Gosforth, Newcastle-on-Tyne.
 MOBERLY: Arthur Hamilton [P. 1907]; 10 Campden House Road, W.
 CUNNINGHAM: William Wyllie [P. 1903]; c/o Gracie, 99 Grant Street, Glasgow.
 TURNBULL: Frederick Loraine [P. 1904]; 65 Wingrove Road, Newcastle-on-Tyne.
 COWDELL: Charles Joseph Morton [P. 1904]; "Sunnyside," Springfield Road, Leicester.
 REIVE: Thomas [P. 1906]; 20 Errwood Road, Levenshulme, Manchester.
 HAMLIN: William Henry [P. 1906]; c/o R. Wynn Owen, Esq., 60 Castle Street, Liverpool.
 MOORE: Thomas Sydney [P. 1903]; Selby Terrace, Maryport, Cumberland.
 BASKERVILLE: John Albert [P. 1903]; 19 Delaunays Road, Crumpsall, Manchester.
 HOWE: Wilfred [P. 1904]; 121 Upperthorpe Road, Sheffield.

- BOTT: Thomas Charles [P. 1907]; c/o Messrs. Tail & Herbert, 18 Friar Lane, Leicester.
- ORDISH: Roland [P. 1906]; 1 Bailey Street, Derby.
- PAGE: John, B.A. Cantab. [P. 1900]; 14 Christ Church Road, Hampstead, N.W.
- WILKINSON: William Henry [P. 1905]; Ivy Bank, Swires Road, Halifax.
- TAPPER: Michael John [P. 1905]; 10 Melina Place, St. John's Wood, N.W.
- WINTER: Douglas Charles [P. 1906]; "Southgate," Ceylon Road, Westcliff-on-Sea.
- STEDHAM: Percy Norman [P. 1905]; 91 West Street, Fareham, Hants.
- CARTER: George Ralphs [P. 1905]; 8 Tower Street, Welford Road, Leicester.
- HAWKINS: Frederick George [P. 1908]; 8 Church Walk, Hendon, N.W.
- KING: Cecil Frederic Ashfield [P. 1905]; "Whitecroft," Ashton-on-Mersey, Cheshire.
- WEDDON: Harry William [P. 1905]; The Hawthorns, Church Hill Road, Handsworth, Birmingham.
- CORNELL: Albert Ernest [P. 1906]; "Pinehurst," Broadfields Road, Chester Road, Erdington.
- BAYLIS: Arthur Gidlow [P. 1907]; c/o A. F. Watson, 38 Church Street, Sheffield.
- AXTEN: Herbert Joseph [P. 1901]; 18 Beresford Road, Hornsey, N.
- BARROW: Thomas Henry [P. 1905]; 100 Shenby Road, Camberwell, S.E.
- BLACKER: Miss Eveline Dew [P. 1905]; 20 Victoria Square, Clifton, Bristol.
- BOWER: George Richard [P. 1906]; 13 St. James's Row, Sheffield.
- BREWERTON: Frank Asquith [P. 1906]; 20 Mayfield Road, Whalley Range, Manchester.
- BURGESS: Arthur [P. 1906]; 31 Parkfield Road, Sefton Park, Liverpool.
- CALDER: Gilbert James [P. 1902]; 52 Clouddale Road, Upper Tooting, S.W.
- CATCHPOLE: Edgar Gooding [P. 1904]; 181 Princes Street, Ipswich, Suffolk.
- CHANTER: Horace Raymond [P. 1907]; 3 Camden Gardens, Shepherd's Bush, W.
- CLAY: Geoffrey Basil [P. 1903]; 225 Gloucester Terrace, Hyde Park, W.
- COCK: Roland Henry Liebreich [P. 1904]; 2 Tregunter Road, South Kensington, W.
- CARKILL: Lawrence Lavery [P. 1905]; Riverside, Ramsey, Isle of Man.
- EVANS: Thomas Glynne [P. 1907]; 19 Rufford Road, Liverpool.
- FORBES: Alexander [P. 1905]; Highmore Lodge, Highmore Road, Caversham.
- GODFREY: Henry Victor [P. 1905]; 26 Ingersoll Road, Shepherd's Bush, W.
- HARROLD: William Howieson [P. 1904]; c/o Charles Mitchell, Esq., 23 Hill Street, Edinburgh.
- HARTMANN: Carl Herbert [P. 1905]; Netherfield House, Weybridge.
- HAWLEY: Charles Dearman [P. 1904]; 9 Dudley Road, Tunbridge Wells.
- HEAVEN: Frank Henry [P. 1907]; 5 Rock Street, Aberkenfig, Bridgend, Glam.
- JARRETT: Eric Rowstone [P. 1905]; 40 West Side, Clapham Common, S.W.
- MINTON: Leonard [P. 1905]; Ashfield Villas, Stockton-on-Tees.
- LONG: Charles William [P. 1906]; "Rhodehurst," Leigham Court Road, S.W.
- MANSFIELD: Leslie [P. 1903]; "Ivall," Southborough Road, Bickley, Kent.
- MIXNS: Stanley Eldon [P. 1905]; 718 Anlaby Road, Hull.
- OWEN: Geoffrey [P. 1906]; 20 Queen Square, W.C.
- PETERS: Thomas James [P. 1906]; 14 Hartington Street, Newcastle-on-Tyne.
- PROCTOR: William Cope [P. 1903]; 70 Pembroke Road, Clifton, Bristol.
- RAYMENT: Albert Hugh [P. 1906]; 27 Claremont Road, Cricklewood, N.W.
- ROWNTREE: Douglas Woodville [P. 1906]; 11 Hammer-smith Terrace, Hammersmith, W.
- SHOOSMITH: Arthur Gordon [P. 1906]; 164 Friar Street, Reading.
- STOUT: John Joseph [P. 1904]; 4 Corporation Street, Stockton-on-Tees.
- STUART: Alexander Davidson [P. 1906]; 4 Coniger Road, Parson's Green, S.W.
- SYMINGTON: Herbert Andrew [P. 1902]; 18 Lincoln Street, Leicester.
- THOMAS: Charles Stanley [P. 1903]; 9 Hill Street, Newport, Mon.
- TINKER: Arthur [P. 1905]; Bank House, Pendleton, Manchester.
- TOONE: John Algernon Edmund [P. 1905]; 228 Plymouth Grove, C.-on-M., Manchester.
- WALKER: Henry Coulton [P. 1904]; Dendron House, Ulverston, Lanes.
- WALKER: Sam Parnham [P. 1904]; 5 Victoria Street, Newark-on-Trent.
- WEST: Archibald Buller [P. 1905]; "The Knowl," Abingdon, Berks.
- WHINCOP: Walter George [P. 1904]; 74 Filey Avenue, Stoke Newington, N.
- WHYMPER: William [P. 1900]; "St. Clares," Ditton Hill, Surbiton, Surrey.
- WILLIAMS: Enoch [P. 1906]; 11 Artesian Road, Westbourne Grove, W.
- WILSON: Geoffrey Cecil [P. 1903]; "Renby," 45 High Road, Streatham.
- WILSON: Herbert [P. 1906]; Hazel House, Tadcaster.

Exemptions from the Intermediate Examination.

The following candidates, who had attended the architectural courses and obtained First-class Certificates at the Universities mentioned against their names, were granted exemption from sitting for the Intermediate Examination, and have been registered as *Students R.I.B.A.* :—

- ADAMS: William Naseby [P. 1905]; St. Augustine's Vicarage, Shaw Street, Liverpool [*School of Architecture, Liverpool University*].
- AINSWORTH: John Cooper [P. 1902]; Arnold Hill, Gee Cross, Hyde [*School of Architecture, Manchester University*].
- CRUTCHLEY: Frederick Ernest [P. 1906]; "Linnevel," Orrell Lane, Aintree [*School of Architecture, Liverpool University*].
- ROBERTS: William John, M.A. [P. 1908]; c/o J. W. Beaumont & Son, 10 St. James' Square, Manchester [*School of Architecture, Manchester University*].
- WOOD: Herbert McGregor [P. 1908]; 125 Kingsley Road, Liverpool [*School of Architecture, Liverpool University*].

Final and Special.

The Final and Special Examinations, qualifying for candidature as *Associate R.I.B.A.*, were held in London from the 19th to the 27th November. Of the 121 candidates examined, 43 passed, and 78

were relegated to their studies. The names and addresses of the passed candidates are as follows:—

[The initials "P." and "S." in the subjoined list signify "Probationer" and "Student" respectively.]

ALLNER: James [P. 1902, S. 1905]; Sturminster Newton Dorset.
 ASH: Horace James [P. 1893, S. 1902]; 20 Countess Road, Nuneaton.
 BESWICK: Alfred Edward [P. 1903, S. 1904]; The Knoll, Swindon, Wilts.
 BOWNASS: James Everett [P. 1904, S. 1906]; c/o Norman Green, Esq., 50 Madeira Road, Streatham, S.W.
 BUCKINGHAM: Ernest Hugh [Special Examination]; 1 Upper King Street, Norwich.
 BUSH: Frederick Thwaites [P. 1904, S. 1906]; 120 Rodenhurst Road, Clapham Park, S.W.
 COLDWELL: Edward Smith [P. 1904, S. 1907]; 116 Chevening Road, Brondesbury Park, N.W.
 DAFT: William Austin [P. 1903, S. 1906]; 27 Jeune Street, Oxford.
 DALTON: Percy [P. 1903, S. 1904]; Home Lea, Burnley Road, Ainsdale, near Southport.
 DAVIES: Horace Francis [Special Examination]; 14 Newgate Street, Chester.
 DEAN: William [P. 1905, S. 1907]; 5 Trafalgar Square, Chelsea, S.W.
 DENMAN: John Leopold [P. 1904, S. 1906]; Ingram House, Stockwell Road, S.W.
 FOSTER: Reginald Charles [P. 1900, S. 1904]; Newton House, Loughton, Essex.
 FRENCH: Harold [P. 1903, S. 1904]; 9 Hugh Street, S.W.
 GRAHAM: Allan [Special Examination]; 15 Primrose Mansions, Battersea Park.
 GROVES: Christopher [P. 1900, S. 1905]; Chester-le-Street, co. Durham.
 HEALEY: Hugh [P. 1900, S. 1905]; 55 Mizzy Road, Rochdale.
 HILL: Thomas Harold [P. 1899, S. 1905]; Fernside, Hazelwood Road, Hale, Cheshire.
 HOSKING: Thomas Stanley [P. 1904, S. 1906]; Vaynoe, Grosvenor Road, Llandrindod Wells, Radnor.
 HUNTER: George Edward [P. 1905, S. 1906]; Wentworth, Gosforth, Northumberland.
 IXER: Sydney Henry Howard [P. 1902, S. 1906]; 71 Sisters Avenue, Clapham Common, S.W.
 LAY: Harry George [P. 1902, S. 1904]; "The Laurels," London Road, Wellingborough.
 MAJOR: William Paul [P. 1899, S. 1905]; 26 Pembroke Road, Clifton, Bristol.
 MOBBS: Sydney Wilfrid [P. 1901, S. 1905]; The Laurels, Oulton, Lowestoft.
 MOLE: Charles Johns [P. 1904, S. 1906]; 27 Diamond Avenue, Plymouth.
 MORLEY: Eric [P. 1901, S. 1905]; 14 Park Drive, Bradford, Yorkshire.
 NEAVE: Stacey Arthur [P. 1904, S. 1906]; Sydney, Australia.
 RIGG: William Arthur [P. 1903, S. 1906]; The Moulton Settlement, City Road, E.C.
 RUDDLE: Alan Wilfrid [P. 1894, S. 1896, Special Examination]; 6 Long Causeway, Peterborough.
 SMITH: Charles Benjamin [P. 1902, S. 1904]; "The Acacias," North Hill Road, Ipswich.
 SURMAN: John Burgess [P. 1902, S. 1904]; 10 Yew Tree Road, Edgbaston, Birmingham.
 SUTCLIFFE: William [P. 1902, S. 1904]; 29 Wellington Road, Todmorden.
 SUTTON: Basil Hope [P. 1902, S. 1904]; Basildon, near Reading.

SYKES: Frank [P. 1900, S. 1901]; 14 Church Road, Chorlton-cum-Hardy, Manchester.
 THOMASSON: William Joseph Mate [P. 1899, S. 1905]; Closeburn, 11 Idlesleigh Road, Bournemouth.
 TYNDALL: Richard John [P. 1898, S. 1904]; 17 Castillain Road, Maida Vale, W.
 VANES: Robert Newton [P. 1907, S. 1907, Special Examination]; Moulton Settlement, City Road, E.C.
 VAUGHAN: James Henry [P. 1900, S. 1905]; The Beeches, 33 Llanthewy Road, Newport, Mon.
 WARD: Frank Dorrington [P. 1904, S. 1905]; Poynings, Park Road, Hastings.
 WARREN: Henry George [P. 1905, S. 1907]; 7 Craigton Road, Eltham, Kent.
 WHITTAKER: Thomas Herbert [P. 1903, S. 1906]; 15 Trent Boulevard, West Bridgford, Nottingham.
 WILSON: William Hardy [P. 1904, S. 1906]; Chelsea Arts Club, 143 Church Street, Chelsea, S.W.
 WOOD: Ernest Marshall [P. 1902, S. 1905]; 31 Wordsworth Avenue, Roath, Cardiff.

The following table shows the number of failures among the eighty relegated candidates in each division of the Final Examination:—

I. Design	49
II. Mouldings and Ornaments	71
III. Building Materials	24
IV. Principles of Hygiene	19
V. Specifications	44
VI. Construction, Foundations, &c.	32
VII. Construction, Iron and Steel, &c.	28

Colonial Examination.

The following candidate passed the Colonial Examination qualifying for candidature as Associate R.I.B.A. held in Melbourne last June:—

MORRELL: James Charles; Public Works Department, Melbourne, Australia.

MINUTES. IV.

At the Fourth General Meeting (Ordinary) of the Session 1908-09, held Monday, 14th December 1908, at 8 p.m.—
 Present: Mr. Ernest George, *President*, in the Chair, 29 Fellows (including 11 members of the Council), 32 Associates (including 3 members of the Council), 3 Hon. Associates, and several visitors—the Minutes of the Business Meeting held 30th November were taken as read and signed as correct.

The decease was announced of John Peter, *Associate*, of Bournemouth.

The following Associates attending for the first time since their election were formally admitted by the President—viz. Stephen Burgoine, Herbert George Jefferies, John Harold Sayner, Alec Smithers.

The Secretary announced that the following candidate had been nominated by the Council for election as Associate—viz. Edgar Hugh Woodcock.

A Paper by Mr. T. R. Spence on THE ELEMENTS OF DESIGN IN INTERNAL DECORATION having been read by the Author, illustrated by lantern slides, and discussed, a vote of thanks was passed to him by acclamation.

The proceedings then closed and the Meeting separated at 10 p.m.

